S.D. Warren Company
Cumberland County
Westbrook, Maine
A-29-70-I-R

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Renewal

FINDINGS OF FACT

After review of the Part 70 License renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	S.D. Warren Company
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	322121
NATURE OF BUSINESS	Paper Mill
FACILITY LOCATION	89 Cumberland St Westbrook, Maine

S.D. Warren Company (SDW) is a non-integrated paper mill producing specialty coated papers from purchased pulps.

SDW has the potential to emit more than 100 tons per year (TPY) of particulate matter (PM), Particulate Matter under 10 micrometers (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_X), and carbon monoxide (CO) and 50 TPY of volatile organic compounds (VOC) and 100,000 tons of carbon dioxide equivalent (CO_2e). Therefore, SDW is a major source for criteria pollutants. SDW has the potential to emit more than 10 TPY of a single hazardous air pollutant (HAP) and more than 25 TPY of combined HAP. Therefore, the source is a major source for HAP.

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Boilers

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel	Manufacture Date
Boiler #21	1,074	biomass, coal, #2 fuel oil, #6 fuel oil	1981
Boiler #17	232.7 (199.0 limit)	#2 fuel oil, #6 fuel oil	1948
Boiler #18	232.7 (199.0 limit)	#2 fuel oil, #6 fuel oil	1948
Technology Center Boiler	8.4	natural gas	1969

Previously licensed Boiler #20 was permanently shut down and taken out of service in 2009 and SDW has requested it be removed from their license.

Emergency Generators

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel Type, % sulfur	Mfr. Date	Install. Date
Generator #1 (Treatment Plant)	2.81	diesel, 0.5%	1998	1998
Generator #2 (Rotary Room)	1.91	diesel/#2 fuel oil, 0.5%	1975	1975
Generator #3 (MacIntosh)	0.67	diesel, 0.5%	1972	1972
Generator #4 (Feedwater)	0.49	diesel/#2 fuel oil, 0.5%	1987	1987
Generator #5 (IT)	2.09	propane, n/a	2004	2005

Other Fuel Burning Equipment

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Fuel	Installation Date
Dryer (#35 Research Coater)	7.7	natural gas	1985
4th Zone Dryer (#2 Coater)	6.0	natural gas	1971
Catalytic Incinerator (#20 Coater)	5.0	natural gas	1990
7th Zone Dryer (#20 Coater)	4.0	natural gas	2010
Floatation Dryer (#20 Coater)	2 @ 4.0 each (8.0 total)	natural gas	2013

Process Equipment

Equipment	Process Rate	Pollution Control Equipment	Installation Date
#9 Paper Machine	185 ton/day	N/A	1963
#2 Coater	20 ton/day	N/A	1963
#20 Coater	70 ton/day	Catalytic Incinerator Wet Scrubbers	1984
#35 Research Coater	N/A	N/A	1999
Starch Pneumatic Conveyor #1 (Silo)	41 ton/hr	Baghouse	1969
Starch Pneumatic Conveyor #2 (Color Room D)	18 ton/hr	Wet Cyclone	1969
Clay Pneumatic Conveyor #1 (Silo)	36 ton/hr	Baghouse	1969
Clay Pneumatic Conveyor #2 (Color Room D)	24 ton/hr	Baghouse & Wet Scrubber	1969
Waste Treatment Plant System	10 MMgal/day	N/A	1976
Ultracast Roll Cleaning	N/A	N/A	pre-1980
Parts Washers	N/A	N/A	N/A
Ash Loading System	100 ton/day	Baghouse	1982

Previously licensed #11 Paper Machine, #14 Paper Machine, and #70 Coater have been permanently shut down and SDW has requested they be removed from their license.

Storage Tanks

Tank ID	Tank Size	Installation Date
#2 Fuel Oil Storage Tank (Boilers #17 & #18)	100,000 gal	1988
#6 Fuel Oil Storage Tank (Boilers 17-21)	500,000 gal	1973
Split Gasoline/Diesel Storage Tank	3,000 gal	2014

Insignificant Activities

SDW has additional insignificant activities including, but not limited to the equipment listed below, which do not need to be listed in the emission equipment tables above. A more comprehensive list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended).

Equipment	Citation
#2 Fuel Oil Storage Tank for Boiler #21	06-096 CMR 140, Appendix B §B-7
LPG Storage Tanks	06-096 CMR 140, Appendix B §B-8
Cooling Pond	06-096 CMR 140, Appendix B §B-12
Sodium Hypochlorite Storage Tanks	06-096 CMR 140, Appendix B §B-18
Ultracast Coaters 1, 3, 4, 45 (production), 50 (research)	06-096 CMR 140, Appendix B §B-1

C. Application Classification

The application for SDW does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is considered to be a Part 70 License renewal issued under 06-096 CMR 140 (as amended).

D. Facility Description

SDW is a non-integrated paper mill producing specialty coated papers from purchased pulps. SDW formerly included a Kraft pulp mill that ceased operation in June of 1999.

SDW uses different mixtures of pulps and coatings to produce paper on one paper machine, three regulated paper coating machines, and five paper coating machines which are considered insignificant activities.

E. General Facility Requirements

SDW is subject to the following state and federal regulations listed below, in addition to the regulations listed for specific units as described further in this license.

CITATION	REQUIREMENT TITLE
06-096 CMR 101	Visible Emissions
06-096 CMR 102	Open Burning
06-096 CMR 103	Fuel Burning Equipment Particulate Emission Standard
06-096 CMR 105	General Process Source Particulate Emission Standard
06-096 CMR 106	Low Sulfur Fuel
06-096 CMR 109	Emergency Episode Regulation
06-096 CMR 110	Ambient Air Quality Standard
06-096 CMR 116	Prohibited Dispersion Techniques
06-096 CMR 117	Source Surveillance
06-096 CMR 130	Solvent Degreasers
06-096 CMR 134	Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds
06-096 CMR 137	Emission Statements
06-096 CMR 138	Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides
06-096 CMR 140	Part 70 Air Emission License Regulations
06-096 CMR 143	New Source Performance Standards
06-096 CMR 144	National Emission Standards for Hazardous Air Pollutants (NESHAP)
40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators
40 CFR Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 CFR Part 64	Compliance Assurance Monitoring
40 CFR Part 70	State Operating Permit Programs
40 CFR Part 98	Mandatory Greenhouse Gas Reporting

Note: CMR = Code of Maine Regulations
CFR = Code of Federal Regulations

F. Units of Measurement

The following units of measurement are used in this license:

gr/dscf	grains per dry standard cubic feet
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
lb/ton	pounds per ton
MMBtu/hr	million British Thermal Units per hour
MMgal/day	million gallons per day
MMscf	million standard cubic feet
ppmdv	parts per million on a dry volume basis
ton/day	ton per day
ton/hr	ton per hour
tpy	ton per year

G. Definitions

Continuously: For purposes of the periodic monitoring requirements in this license, "continuously" means that periodic monitors must be operated at all times the relevant emissions unit is operating except for periods of monitor malfunction or maintenance. SDW shall be considered in compliance with a specific periodic monitoring requirement provided the monitor is up and operational such that SDW is able to record the required periodic monitor data on the frequency required by this license.

Records and Logs: For purposes of this license, records or logs may be handwritten or computer records.

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. NO_x RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 CMR 138 (as amended) is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons/year. Amendment A-29-71-Y-A, issued to the facility on 6/12/96, addressed NO_x RACT requirements. Boilers #17, #18, and #21 were determined to be subject to NO_x RACT.

Boilers #17 and #18 are subject to the NO_x RACT limit established in 06-096 CMR 138 for medium size oil-fired boilers. SDW also limited the firing capacity of these boilers to 199.0 MMBtu/hr each to avoid the requirement to install NO_x CEMS.

Boiler #21 is subject to the NO_x RACT limit established in 06-096 CMR 138 for boilers firing wood and coal. Compliance is demonstrated through the continuous operation of a NO_x CEMS.

The NO_X RACT requirements are incorporated in this renewal.

C. VOC RACT (Reasonably Available Control Technology)

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 CMR 134 (as amended) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year. Amendment A-29-71-Z-M, issued to the facility on 12/18/95, addressed VOC RACT requirements. The Waste Water Treatment Plant was determined to be subject to VOC RACT and compliance is demonstrated by complying with the facility's National Pollution Discharge Elimination System (NPDES) permit. All other units addressed in this amendment have since been removed from the license. The VOC RACT requirements are incorporated in this renewal.

D. Mandatory Greenhouse Gas (GHG) Reporting

Federal regulation 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility which falls into any one of the

following three categories, per 40 CFR Part 98, Subpart A, *General Provision*, § 98.2, *Who must report?*

(a)(1) A facility that contains any source category that is listed in Table A–3 of this subpart in any calendar year starting in 2010.

(a)(2) A facility that contains any source category that is listed in Table A–4 of this subpart and that emits 25,000 metric tons CO_2e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A–3 and Table A–4 of this subpart.

(a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.

(i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
(ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.
(iii) The facility emits 25,000 metric tons CO_2e or more per year in combined emissions from all stationary fuel combustion sources.

If SDW emits more than 25,000 metric tons CO_2e in a calendar year, the facility will meet all three conditions listed in paragraph (a)(3) above, and will be subject to the recordkeeping and reporting requirements of 40 CFR Part 98.

E. Compliance Assurance Monitoring (CAM)

40 CFR Part 64, *Compliance Assurance Monitoring*, is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100 tons/year for any pollutant.

Federal regulation 40 CFR Part 64 §64.2(b)(1)(vi) specifies the exemption from specific CAM requirements for any emission units subject to emission limitations or standards for which a Part 70 air emission license specifies a continuous compliance determination method. Furthermore, 40 CFR Part 64 §64.2(b)(1)(i) specifies the exemption from specific CAM requirements for any emission units subject to emission limitations or standards in a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP) proposed by the Administrator after November 15, 1990. [40 CFR Part 64 §64.2(b)]

Therefore, no units at the SDW are subject to the CAM requirements due to each individual unit not meeting the applicable requirements, including the unit having emission limits, a control device to meet the limits, and pre-control emissions greater than 100 tons/year for any pollutant, or they are specifically exempt from CAM requirements according to §64.2(b)(1).

F. Stack Testing for Particulate Matter

The previous license had a requirement to stack test Boilers #21, #17, and #18 for particulate matter once every two years. Since the issuance of the initial Part 70 air emission license, the statutory requirement of 38 M.R.S.A. §589, Sub-section 2 has been revised as follows: "A person is not required to conduct stack tests for particulate matter on a source monitored by a continuous monitoring device for opacity as specified by 40 Code of Federal Regulations, Part 60, Appendix B, specification 1 or appropriate surrogate parameters as required by the commissioner more frequently than once every 5 years unless visible emissions, operating parameters or other information indicates the source may be operating out of compliance with any applicable emission standard or unless there are more stringent federal requirements. If visible emissions, operating parameters or other information indicates potential noncompliance with an air emission standard or if there are more stringent federal requirements, the Department may require additional stack tests."

The revised timeframe for PM stack testing is incorporated into this renewal for Boiler #21 since this unit is required to monitor for opacity.

As part of this renewal, SDW has requested that the license include federally enforceable requirements that limit the operation of Boilers #17 and #18 to less than 10% of their annual capacity. As such, Boilers #17 and #18 will no longer be required to operate a continuous opacity monitor per 06-096 CMR 117, Section (1)(B)(1)(b) and the statute mentioned above will not apply to them.

G. Boiler #21

SDW operates Boiler #21 as the mill's main source of steam and power and for the production of electricity for sale. Boiler #21 was manufactured in 1981 by Babcock & Wilcox.

Boiler #21 is licensed to combust biomass fuel, coal, #6 fuel oil, specification and non-specification waste oil, and oily secondary material. It may also utilize #2 fuel oil as an igniter fuel. Biomass fuel includes wood chips, bark, waste paper, wood waste, sludge and wood from construction or demolition (CDD). Oily secondary material includes oily rags and oil-soaked absorbent materials that have been generated on site from maintenance and spill cleanup activities.

Boiler #21 has a maximum design heat input rating of 1,074 MMBtu/hr firing biomass fuel and coal. It has a maximum design heat input capacity of 839 MMBtu/hr when firing only coal and 597 MMBtu/hr when firing only #6 fuel oil.

Emissions exit through a stack which has an inside diameter of 126 inches and above ground level (AGL) height of 360 feet.

1. New Source Performance Standards (NSPS)

   Boiler #21 is subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Fossil Fuel Fired Steam Generating Units*, 40 CFR Part 60, Subpart D. These standards apply to steam generating units with a heat input capacity of 250 MMBtu/hr or more that are constructed after August 17, 1971.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   Boiler #21 is located at a major source of HAP and therefore is not subject to *NESHAP for Area Sources: Industrial/Commercial/Institutional Boilers* contained in 40 CFR Part 63, Subpart JJJJJJ.

   Boiler #21 is not subject to *NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units* contained in 40 CFR Part 63, Subpart UUUUU. Boiler #21 cogenerates steam and electricity. However, less than one-third of its potential electric output is supplied to a utility distribution system. Therefore, Boiler #21 is not an Electric Utility Steam Generating Unit (EGU) as defined in this subpart.

   Boiler #21 is subject to *NESHAP Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* contained in 40 CFR Part 63, Subpart DDDDD. Boiler #21 is considered an existing unit.

3. Control Equipment

   PM emissions from the Boiler #21 are controlled by a multiple centrifugal cyclone separator (multiclone) followed by an electrostatic precipitator (ESP).

   During normal operation, SDW shall operate, at a minimum, the number of ESP fields in operation during the most recent stack test demonstrating compliance with licensed PM emission limits. In 2007 SDW demonstrated compliance when operating five (5) fields of the ESP. During periods of ESP

malfunction or maintenance, SDW shall operate a minimum of five fields of the ESP.

Upon written notification to the Department, and in accordance with the *Bureau of Air Quality's Air Emission Compliance Test Protocol*, SDW may perform additional PM emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall SDW be relieved of its obligation to meet its licensed emission limits.

4. Emission Limits and Streamlining

For Boiler #21, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.30 lb/MMBtu	06-096 CMR 103, §2.A.(3)(b)	0.08 lb/MMBtu *
	0.10 lb/MMBtu	40 CFR Part 60, Subpart D, §60.42(a)(1)	
	0.08 lb/MMBtu	06-096 CMR 140, BACT (#1615, Amendment #1)	
	85.9 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	85.9 lb/hr º
PM_{10}	0.08 lb/MMBtu	06-096 CMR 140, BPT (A-29-71-C-A/R)	0.08 lb/MMBtu º
	85.9 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	85.9 lb/hr º
SO_2 (firing oil w/o coal) See Note 1	0.8 lb/MMBtu (3-hr block avg)	40 CFR Part 60, Subpart D, §60.43(a)(1)	0.8 lb/MMBtu (3-hr block avg)
	859.2 lb/hr (based on 0.8 lb/MMBtu)	06-096 CMR 140, BPT (A-29-70-A-I)	859.2 lb/hr º
SO_2 (firing coal alone or with other fuels) See Note 2	0.96 lb/MMBtu (3-hr block avg)	06-096 CMR 106, §2(B)(2)	0.96 lb/MMBtu * (3-hr block avg)
	1.2 lb/MMBtu (3-hr block avg)	40 CFR Part 60, Subpart D, §60.43(a)(2)	
	1,031.0 lb/hr (based on 0.96 lb/MMBtu)	06-096 CMR 140, BPT (A-29-70-A-I)	1,031.0 lb/hr º

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
SO_2 (any fuel(s))	0.8 lb/MMBtu (30-day rolling avg)	06-096 CMR 140, BPT (A-29-70-A-I)	0.8 lb/MMBtu (30-day rolling avg)
	#6 fuel oil: 2.0% S limit, by weight	06-096 CMR 106, §2(A)(2) & 38 MRSA §603-A(2)(A)(1)	#6 fuel oil: 2.0% S limit, by weight
	#6 fuel oil: 0.5% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(1)	#6 fuel oil: 0.5% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
	#2 fuel oil, ASTM D396 compliant (0.5% S)	06-096 CMR 140, BPT	#2 fuel oil, ASTM D396 compliant (0.5% S)
	#2 fuel oil: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(a)	#2 fuel oil: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute
	#2 fuel oil: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(b)	#2 fuel oil: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
NO_x (firing oil w/o coal) See Note 1	0.30 lb/MMBtu (24-hr block avg)	06-096 CMR 138, §3(B)(3)&(8)	0.30 lb/MMBtu * (3-hr block avg)
	0.30 lb/MMBtu (3-hr block avg)	40 CFR Part 60, Subpart D, §60.44(a)(2)	
	322.2 lb/hr (based on 0.30 lb/MMBtu)	06-096 CMR 140, BPT (A-29-70-A-I)	322.2 lb/hr º
NO_x (firing coal alone or with other fuels) See Note 2	0.38 lb/MMBtu (24-hr block avg)	06-096 CMR 138, §3(B)(4)&(8)	0.38 lb/MMBtu (24-hr block avg)
	0.70 lb/MMBtu (3-hr block avg)	40 CFR Part 60, Subpart D, §60.44(a)(3)	0.70 lb/MMBtu (3-hr block avg)
	751.8 lb/hr (based on 0.70 lb/MMBtu)	06-096 CMR 140, BPT (A-29-70-A-I)	751.8 lb/hr º

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
CO	644.4 lb/hr	AP-42 Table 1.6-2 dated 9/03 (0.6 lb/MMBtu) and 06-096 CMR 140, BPT (A-29-70-A-I)	644.4 lb/hr º
VOC	40.8 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	40.8 lb/hr º

* streamlining requested
º Enforceable by State-only

Note 1: For periods that oil is fired alone or in conjunction with other licensed fuels except coal.
Note 2: For periods that coal is fired alone or in conjunction with other licensed fuels.

5. Visible Emissions

Visible Emissions Regulation, 06-096 CMR 101, contains an applicable emission limit of 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [§2(B)(1)(f)]

New Source Performance Standard (NSPS) *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR 60, Subpart D, contains an applicable emission limit of 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity except for periods of startup and shutdown. [§60.42(a)(2)]

SDW accepts streamlining for opacity requirements. The NSPS standard is considered more stringent. Therefore, only the more stringent opacity limit is included in this license.

In regards to Boiler #21, “startup” is defined as the period of time beginning when fuel oil is first introduced into the boiler and ending when the boiler has been transitioned from firing fuel oil to firing only solid fuel. For purposes of exemption from the visible emissions standard, this period of time shall not exceed 10 hours.

In regards to Boiler #21, “shutdown” is defined as the period of time beginning when steam is no longer being supplied to the process by the boiler and ending when all fuel has stopped being introduced to the boiler. For

purposes of exemption from the visible emissions standard, this period of time shall not exceed 2 hours.

6. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler #21 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Unit of Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 CFR Part 60, App. A, Method 5	Once every five years (by 12/31/17).
	lb/hr		
PM_{10}	lb/MMBtu	40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
	lb/hr		
SO_2	lb/MMBtu	SO_2 CEMS on a 3-hour block average	Continuous (in accordance with 40 CFR Part 60, App. B)
	lb/hr	40 CFR Part 60, App. A, Method 6	As requested
NO_X	lb/MMBtu	NO_x CEMS on a 3-hour or 24-hour block average basis (midnight to midnight) as required	Continuous (in accordance with 40 CFR Part 60, App. B)
	lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	lb/hr	40 CFR Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 CFR Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% Opacity	COMS on a 6-minute block average basis	Continuous (in accordance with 40 CFR Part 60, App. B)

7. Compliance Assurance Monitoring (CAM)

CAM is not applicable to Boiler #21. For PM Boiler #21 does have emission limits, a control device to meet the limits, and pre-control emissions greater than 100 ton/year. However, Boiler #21 is subject to 40 CFR Part 63, Subpart DDDDD which was proposed after November 15, 1990. The CAM regulation 40 CFR Part 64, §64.2(b)(1)(i) specifies an exemption from CAM requirements for any emission units subject to emission limitations or standards in a NSPS or NESHAPs regulation proposed by the Administrator after November 15, 1990.

8. Periodic Monitoring

SDW shall monitor and record the following for Boiler #21 and its associated air pollution control equipment as indicated in the following tables.

Boiler #21			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Solid Fuel Use	Tons	Conveyor belt scales or purchase records	Monthly and 12-month rolling total
Liquid Fuel Use	Gallons	Fuel flow meters or purchase records	Monthly and 12-month rolling total
Liquid Fuel Sulfur Content	Percent by weight	Fuel receipts from supplier	As fuel is received
Waste Oil Added to #6 Oil Tank	Gallons	Written Records	Monthly and 12-month rolling total
Waste Oil Type	N/A	Written Records/Log	Documentation that the waste oil fired meets the definition of “specification” or “off-specification” waste oil.
Oily Secondary Material Fired	Tons	Written Records/Log	Monthly and 12-month rolling total
Steam Flow	lb/hr	Flow Transmitter	Monitor: Continuously Record: Daily

Multiclone on Boiler #21			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Gas pressure drop across Multiclone	Pounds per square inch (gauge)	Pressure gauges	Monitor: Continuously Record: Once per shift

ESP on Boiler #21			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Secondary Voltage	Volts or kilovolts	Volt meter	Monitor: Continuously Record: Once per shift

9. Parameter Monitoring

There are no parameter monitors for Boiler #21.

10. CEMS and COMS

For Boiler #21, the table below lists the required continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS). Note: SDW has changed its diluent monitoring from O_2 to CO_2.

Pollutant and Continuous Monitor	**Origin and Authority**
NO_X CEMS	06-096 CMR 117, 06-096 CMR 138, and 40 CFR 60, Subpart D §60.45(a)
SO_2 CEMS	40 CFR 60, Subpart D §60.45(a)
CO_2 CEMS	40 CFR 60, Subpart D §60.45(a)
Opacity COMS	06-096 CMR 117 and 40 CFR 60, Subpart D §60.45(a)

H. Boilers #17 and #18

SDW operates Boilers #17 and #18 as back-up boilers to Boiler #21. Boilers #17 and #18 were built and installed by Combustion Engineering in 1948. They are twin boilers, located side by side and originally designed to burn pulverized coal as primary fuel with #6 fuel oil as back-up.

In 1961 both boilers were converted to firing only fuel oil, primarily #6 fuel oil. They are designed to each fire a maximum of 1,572 gal/hr, equivalent to 232.7 MMBtu/hr. However, Air Emission License Amendment A-29-71-Y-A dated 6/12/96, established heat input restrictions on Boilers #17 and #18 of 199.0 MMBtu/hr per boiler to avoid the requirement for operating a NO_x CEM per 06-096 CMR 117 and 138. To insure compliance with the heat input restriction, SDW is required to restrict oil firing rates by use of oil supply valves or pneumatic controls such that the oil supplied to each of these boilers never exceeds 10,575 lb/hr of #6 fuel oil (1,327 gal/hr). A mass-flow transmitter shall measure the #6 oil flow rate to each boiler. SDW shall keep daily fuel use records for each boiler.

SDW has requested that Boilers #17 and #18 each be restricted to firing less than 10% of their annual firing capacity to ensure that Boilers #17 and #18 are considered "limited use boilers" for purposes of Boiler MACT (40 CFR Part 63, Subpart DDDDD). Therefore, the amount of oil fired in each of these boilers is limited to less than 1,162,160 gallons per year which is equivalent to 10% of the annual capacity factor for each boiler.

In addition to #6 fuel oil, Boilers #17 and #18 utilize #2 fuel oil as a startup fuel and also fire up to 10,000 gallons per year of specification or non-specification waste oil.

Emissions exit through the common main stack. Air Emission License Amendment A-29-71-AB-M dated 7/17/97 permitted SDW to lower the main stack from 353 ft to 250 ft above ground level contingent upon the sulfur content in the #6 fuel oil fired in Boilers #17 and #18 not exceeding 0.7% by weight. At that time modeling was performed to demonstrate compliance with ambient air quality standards at the reduced stack height.

To date, SDW has lowered the height of the main stack by only eight feet. However, SDW is permitted to lower the stack further in the future, provided it does not go below 250 feet above ground level and the fuel sulfur requirement above is met.

1. New Source Performance Standards (NSPS)

   Boilers #17 and #18 are not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Fossil-Fuel-Fired Steam Generators*, 40 CFR Part 60, Subpart D due to their age. These standards apply to steam generating units with a heat input capacity of 250 MMBtu/hr or more that are constructed after August 17, 1971.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   Boilers #17 and #18 are each subject to *NESHAP Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* contained in 40 CFR Part 63, Subpart DDDDD. These boilers are considered existing units designed to burn heavy liquid fuel.

   SDW has requested a federally enforceable limit for Boilers #17 and #18 such that their annual capacity does not exceed 10%. This will make Boilers #17 and #18 "limited-use" boilers as defined in Subpart DDDDD.

3. Emission Limits and Streamlining

For Boilers #17 and #18, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. The emission limits listed below are for each boiler unless stated otherwise.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.20 lb/MMBtu	06-096 CMR 103, §2.A.(1)	0.20 lb/MMBtu
	39.8 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	39.8 lb/hr
PM_{10}	39.8 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	39.8 lb/hr
SO_2	#6 fuel oil: 2.0% S limit, by weight	06-096 CMR 106, §2.A.(2)	#6 fuel oil: 2.0% S limit, by weight
	#6 fuel oil: 0.5% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(1) and (2)	#6 fuel oil: 0.5% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
	#2 fuel oil: ASTM D396 compliant (0.5% S)	06-096 CMR 140, BPT	#2 fuel oil: ASTM D396 compliant (0.5% S)
	#2 fuel oil: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)	#2 fuel oil: 0.005% S limit, by weight beginning July 1, 2018 or the date specified in the statute
	#2 fuel oil: 0.0015% S limit by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)	#2 fuel oil: 0.0015% S limit by weight beginning Jan. 1, 2008 or the date specified in the statute
	418.2 lb/hr (based on 2.0% S limit, by weight)	06-096 CMR 140, BPT (A-29-70-A-I)	418.2 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
NO_x	0.30 lb/MMBtu	06-096 CMR 138, §3.B.(1) based on a one hour average	0.30 lb/MMBtu
	59.7 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	59.7 lb/hr
CO	6.6 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	6.6 lb/hr
VOC	1.7 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	1.7 lb/hr

Table Notes: * streamlining requested
% S = percent fuel sulfur, by weight

4. Visible Emissions

Visible Emissions Regulation, 06-096 CMR 101, contains two applicable emission limits.

The combined stack for Boilers #17 and #18 shall not exceed an opacity of 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period when only one boiler is in operation. [§2(B)(6)(a)]

The combined stack for Boilers #17 and #18 shall not exceed an opacity of 40% opacity on a six (6) minute block average basis, except for no more than three (3) six (6) minute block averages in a 2-hour period when both boilers are in operation. [§2(B)(6)(b)]

These limits apply at all times except for periods of startup and shutdown as defined below per 06-096 CMR 101 §3(B).

In regards to Boilers #17 and #18, “startup” is defined as the period of time beginning when fuel oil is first introduced into the boiler and ending when the boiler has picked up the mill’s full steam load and that load has been stabilized. For purposes of exemption from the visible emissions standard, this period of time shall not exceed 8 hours in cases of a warm startup and 12 hours in cases of a cold startup.

A “warm” startup is defined as the situation when Boiler #21 is online and the mill steam piping system is hot.

A "cold" startup is defined as the situation when Boiler #21 is off-line and the mill steam piping system is cold.

In regards to Boilers #17 and #18, "shutdown" is defined as the period of time beginning when steam is no longer being supplied to the process by the boiler and ending when all fuel has stopped being introduced to the boiler. For purposes of exemption from the visible emissions standard, this period of time shall not exceed 2 hours.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boilers #17 and #18 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	**Unit of Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu lb/hr	40 CFR Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr	40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
SO_2	lb/hr	40 CFR Part 60, App. A, Method 6	As requested
NO_X	lb/MMBtu lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	lb/hr	40 CFR Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 CFR Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% Opacity	40 CFR Part 60, App. A, Method 9	As requested

6. Compliance Assurance Monitoring (CAM)

CAM is not applicable to either Boiler #17 or #18. A control device is not used to achieve compliance with emissions limitations.

7. Periodic Monitoring

SDW shall monitor and record the following for Boilers #17 and #18 as indicated in the following table.

Boilers #17 and #18			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
#6 fuel oil use (#17 & #18 individually)	Gallons	Fuel flow meter	Monthly and calendar year total
#6 fuel oil sulfur content	Percent by weight	Fuel receipts from supplier	As fuel is received
#2 fuel oil use (both #17 & #18 combined)	Gallons	Fuel flow meter	Monthly and calendar year total
#2 fuel oil sulfur content	Percent by weight	Fuel receipts from supplier	As fuel is received
Capacity Factor	%	Log	Annual on a calendar year basis
Steam Flow	lb/hr	Flow Transmitter	Monitor: Continuously Record: Daily

8. Parameter Monitoring

There are no parameter monitors for Boilers #17 and #18.

9. CEMS and COMS

There are no CEMS or COMS required for Boilers #17 and #18.

Since both Boilers #17 and #18 are subject to federally-enforceable limits limiting them to less than 10% of each boiler's annual capacity, a COMS is not required by either 06-096 CMR 117 or 40 CFR Part 63, Subpart DDDDD.

I. Technology Center Boiler

SDW operates a small boiler located in the mill's Technology Center. The boiler is utilized for steam heating needs for the Technology Center in the event that the facility's power boilers cannot supply enough steam to meet the needs of the Technology Center.

The boiler was manufactured by Clever-Brooks in 1969 and has a maximum design heat input capacity of 8.4 MMBtu/hr firing natural gas at a firing rate of 6,700 standard cubic feet per hour (scf/hr).

1. New Source Performance Standards (NSPS)

   The Technology Center Boiler is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc due its size. These standards apply to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   The Technology Center Boiler is subject to *NESHAP Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* contained in 40 CFR Part 63, Subpart DDDDD. This boiler is considered an existing unit designed to burn gas 1.

   SDW has requested a federally enforceable limit of 7.2 MMscf of natural gas burned per year for the Technology Center Boiler such that their annual capacity does not exceed 10%. This will make the Technology Center Boiler a "limited-use" boiler as defined in Subpart DDDDD.

3. Emission Limits and Streamlining

   For the Technology Center Boiler, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.12 lb/MMBtu	06-096 CMR 103 §2.B(1)(a)	0.12 lb/MMBtu
	0.1 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.1 lb/hr
PM_{10}	0.1 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.1 lb/hr
SO_2	0.005 lb/hr	06-096 CMR 140, BPT	0.005 lb/hr
NO_X	0.8 lb/hr	06-096 CMR 140, BPT	0.8 lb/hr
CO	0.7 lb/hr	06-096 CMR 140, BPT	0.7 lb/hr
VOC	0.04 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.04 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
Visible Emissions	10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hr period	06-096 CMR 101 §2(B)(1)(c)	10% opacity on a six (6) minute block average basis *
	10% opacity on a six (6) minute block average basis	06-096 CMR 140, BPT (A-29-70-A-I)	

Table Notes: * streamlining requested

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Technology Center Boiler shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to the Technology Center Boiler.

6. Periodic Monitoring

SDW shall monitor and record the following for the Technology Center Boiler as indicated in the following table.

The Technology Center Boiler			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Fuel Usage (to entire Tech Center)	scf	Fuel flow meter	monthly and calendar year total

7. Parameter Monitoring

There are no parameter monitors for the Technology Center Boiler.

8. CEMS and COMS

There are no CEMS or COMS required for the Technology Center Boiler.

J. Emergency Generators

SDW operates five emergency generators. Four of the emergency generators (Generators #1 - #4) fire diesel fuel and are rated at 2.81 MMBtu/hr, 1.91 MMBtu/hr, 0.67 MMBtu/hr, and 0.49 MMBtu/hr. The diesel emergency generators were manufactured in 1998, 1975, 1972, and 1987 respectively.

One of the emergency generators (Generator #5) fires propane. It is rated at 2.1 MMBtu/hr and was manufactured in 2004. The propane emergency generator is a 4-stroke, rich burn engine.

1. New Source Performance Standards (NSPS)

The federal regulation 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is not applicable to Generators #1-#4. These generators were all manufactured prior to April 1, 2006.

The federal regulation 40 CFR Part 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* is not applicable to Generator #5. This generator was manufactured prior to June 12, 2006.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to Generators #1 - #5. The units are considered existing, emergency stationary reciprocating internal combustion engines at a major HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements.

a. Emergency Definition:

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the following criteria:

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when

electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) Paragraph (1) above notwithstanding, the emergency stationary RICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:

(i) Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Paragraphs (1) and (2) above notwithstanding, emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, and periods of voltage deviation or low frequency, as provided in paragraph (2) above.

The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except provided in the following paragraphs:

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution center.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
(b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
(c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
(d) The power is provided only to the facility itself or to support the local transmission and distribution system.
(e) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Generators #1-5 shall be limited to the usage outlined in §63.6640(f) and therefore may be classified as existing emergency stationary RICE as defined in 40 CFR Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in §63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all the requirements for non-emergency engines.

b. 40 CFR Part 63, Subpart ZZZZ Requirements:

(1) Operation and Maintenance Requirements

	Compliance Dates	**Operating Limitations* (40 CFR §63.6603(a) and Table 2(d))**
Compression ignition (diesel, fuel oil) units: ***Generators #1-#4***	No later than May 3, 2013	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Spark ignition (natural gas, propane) units: ***Generator #5***	No later than October 19, 2013	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The generators shall be operated and maintained according to the manufacturer's emission-related written instructions or facility shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

(2) Optional Oil Analysis Program

SDW has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, SDW must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR§63.6625(i)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements
During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit For Maintenance and Testing
The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). [40 CFR §63.6640(f)]

(6) Recordkeeping
SDW shall keep records that include maintenance conducted on the generators and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), SDW must keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

(7) Requirements for Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake HP)
If SDW operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii),

beginning January 1, 2015, the diesel fuel fired in Generators #1-#4 shall not exceed 15 ppm sulfur (0.0015%). Any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR §63.6604(b)]

If SDW operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

3. Emission Limits and Streamlining

For Generators #1 - #5, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Generator #1 (Treatment Plant)			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.34 lb/hr	06-096 CMR 140, BPT	0.34 lb/hr
PM_{10}	0.34 lb/hr	06-096 CMR 140, BPT	0.34 lb/hr
SO_2	diesel: ASTM D396 compliant (0.5% S)	06-096 CMR 140, BPT	diesel: ASTM D396 compliant (0.5% S)
	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(a)	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute
	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(b)	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
	1.45 lb/hr (based on 0.5% S limit, by weight)	06-096 CMR 140, BPT	1.45 lb/hr
NO_X	7.43 lb/hr	06-096 CMR 140, BPT	7.50 lb/hr
CO	0.63 lb/hr	06-096 CMR 140, BPT	0.63 lb/hr
VOC	0.98 lb/hr	06-096 CMR 140, BPT	0.98 lb/hr
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period

Generator #2 (Rotary Room)			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.23 lb/hr	06-096 CMR 140, BPT	0.23 lb/hr
PM_{10}	0.23 lb/hr	06-096 CMR 140, BPT	0.23 lb/hr
SO_2	diesel: ASTM D396 compliant (0.5% S)	06-096 CMR 140, BPT	diesel: ASTM D396 compliant (0.5% S)
	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(a)	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute
	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(b)	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
	0.98 lb/hr (based on 0.5% S limit, by weight)	06-096 CMR 140, BPT (A-29-70-A-I)	0.98 lb/hr
NO_X	8.42	06-096 CMR 140, BPT (A-29-70-A-I)	8.42 lb/hr
CO	1.81 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	1.81 lb/hr
VOC	0.67 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.67 lb/hr
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period

Generator #3 (MacIntosh)			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.08 lb/hr	06-096 CMR 140, BPT	0.08 lb/hr
PM_{10}	0.08 lb/hr	06-096 CMR 140, BPT	0.08 lb/hr
SO_2	diesel: ASTM D396 compliant (0.5% S)	06-096 CMR 140, BPT	diesel: ASTM D396 compliant (0.5% S)
	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(a)	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute
	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(b)	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
	0.34 lb/hr (based on 0.5% S limit, by weight)	06-096 CMR 140, BPT	0.34 lb/hr
NO_X	2.95 lb/hr	06-096 CMR 140, BPT	2.95 lb/hr
CO	0.64 lb/hr	06-096 CMR 140, BPT	0.64 lb/hr
VOC	0.23 lb/hr	06-096 CMR 140, BPT	0.23 lb/hr
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period period	06-096 CMR 101 §2(B)(1)(f)	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period

Generator #4 (Feedwater)			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.06 lb/hr	06-096 CMR 140, BPT	0.06 lb/hr
PM_{10}	0.06 lb/hr	06-096 CMR 140, BPT	0.06 lb/hr
SO_2	diesel: ASTM D396 compliant (0.5% S)	06-096 CMR 140, BPT	diesel: ASTM D396 compliant (0.5% S)
	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(a)	diesel: 0.005% S limit, by weight beginning July 1, 2016 or the date specified in the statute
	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute	38 MRSA §603-A(2)(A)(3)(b)	diesel: 0.0015% S limit, by weight beginning Jan. 1, 2018 or the date specified in the statute
	0.25 lb/hr (based on 0.5% S limit, by weight)	06-096 CMR 140, BPT	0.25 lb/hr
NO_X	2.16 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	2.16 lb/hr
CO	0.47 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.47 lb/hr
VOC	0.17 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.17 lb/hr
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period

Generator #5 (IT)			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.25 lb/hr	06-096 CMR 140, BPT	0.25 lb/hr
PM_{10}	0.25 lb/hr	06-096 CMR 140, BPT	0.25 lb/hr
NO_X	4.77 lb/hr	06-096 CMR 140, BPT	4.77 lb/hr
CO	7.81 lb/hr	06-096 CMR 140, BPT	7.81 lb/hr
VOC	0.06 lb/hr	06-096 CMR 140, BPT	0.06 lb/hr
Visible Emissions	No greater than 20% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(d)	No greater than 20% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period

Table Notes: % S = percent fuel sulfur, by weight

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with Generators #1 - #5 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to Generators #1 - #5.

6. Periodic Monitoring

SDW shall monitor and record the following for each generator as indicated in the following table.

Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
fuel oil sulfur content (diesel units only)	Percent, by weight	Fuel receipts from supplier	As fuel is purchased
Operating time	Hours	Hour Meter	Monthly and calendar year total

7. Parameter Monitoring

There are no parameter monitors for Generators #1 - #5.

8. CEMS and COMS

There are no CEMS or COMS required for Generators #1 - #5.

K. #35 Research Coater and Dryer

SDW operates a small coater, designated #35 Research Coater, in their Technology Center to test different coating grades. The coater makes use of aqueous-based coating materials only, (i.e., coatings that meet the low solvent coating requirements of 06-096 CMR 123).

The #35 Research Coater is used for running coatings experimentally. As such, the coater runs a variety of coatings for a short period of time. The coatings are not run for production purposes. SDW will meet periodic monitoring requirements and Chapter 123 by maintaining records of the total VOCs emitted from the #35 Research Coater on a monthly basis and a certification that all coatings used contain less than 2.9 pounds of VOC per gallon.

SDW operates a Dryer for their #35 Research Coater. The Dryer is used to provide heat for convection drying of paper coatings during coating trials. The Dryer has a maximum design heat input of 7.7 MMBtu/hr firing natural gas and is located in the Technology Center. It was manufactured by W.R. Grace in 1985.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

SDW is subject to 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating.* Section 63.3300(g) of Subpart JJJJ exempts research and laboratory coaters. Therefore, #35 Research Coater is not considered an existing affected source subject to all applicable requirements of Subpart JJJJ.

2. Emission Limits and Streamlining

For #35 Research Coater and Dryer, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.12 lb/MMBtu	06-096 CMR 103 §2.B(1)(a)	0.05 lb/MMBtu *
	0.05 lb/MMBtu	06-096 CMR 140, BPT	
	0.65 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.65 lb/hr
PM_{10}	0.65 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.65 lb/hr
SO_2	0.01 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.01 lb/hr
NO_X	1.26 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	1.26 lb/hr
CO	1.06 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	1.06 lb/hr
VOC (from fuel burning)	0.07 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.07 lb/hr
VOC (from coatings)	2.9 lb/gal of coating applied	06-096 CMR 123	2.9 lb/gal of coating applied
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 10% opacity on a six (6) minute block average basis *
	No greater than 10% opacity on a six (6) minute block average basis	06-096 CMR 140, BPT (A-29-70-A-I)	

Table Notes: * streamlining requested

3. Emission Limit Compliance Methods

SDW shall keep certifications stating all coatings used on #35 Research Coater have an applied VOC content less than 2.9 pounds of VOC per gallon of coating excluding water and exempt compounds.

Compliance with the emission limits associated with #35 Research Coater Dryer shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

4. Compliance Assurance Monitoring

CAM is not applicable to the #35 Research Coater and Dryer.

5. Periodic Monitoring

SDW shall monitor and record the following for #35 Research Coater and Dryer as indicated in the following table.

#35 Research Coater and Dryer			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
fuel use (to entire Tech Center)	scf	Fuel flow meter	Monthly and 12-month rolling total
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC emitted	tons	Calculations	Monthly & 12-month rolling total

6. Parameter Monitoring

There are no parameter monitors for the #35 Research Coater and Dryer.

7. CEMS and COMS

There are no CEMS or COMS required for #35 Research Coater and Dryer.

L. #2 Coater and 4th Zone Dryer

The #2 Coater was originally installed in 1963 and was capable of operating with either solvent-based or aqueous-based coatings. The #2 Coater was shut down in the fall of 2001.

In February 2003 SDW applied to the Department to permit the reactivation of the #2 Coater. In Amendment #22 to Air Emission License A-29-71-C-A/R, the Department approved reactivation of the #2 Coater with the limitation that it only use aqueous-based coatings (i.e. coatings meeting the low solvent coating requirements in 06-096 CMR 123).

SDW operates a natural gas fired dryer with a maximum design heat input capacity of 6.0 MMBtu/hr firing natural gas and is used to provide heat for drying of paper coatings applied by the #2 Coater (designated the 4th Zone Dryer).

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   SDW is subject to 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating.* Therefore, #2 Coater is considered an existing affected source subject to all applicable requirements of Subpart JJJJ.

2. Emission Limits and Streamlining

   For #2 Coater and 4th Zone Dryer, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
PM	0.12 lb/MMBtu	06-096 CMR 103 §2.B(1)(a)	0.05 lb/MMBtu *
	0.05 lb/MMBtu	06-096 CMR 140, BPT	
	0.30 lb/hr	06-096 CMR 140, BPT	0.30 lb/hr
PM_{10}	0.30 lb/hr	06-096 CMR 140, BPT	0.30 lb/hr
SO_2	0.01 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.01 lb/hr
NO_X	0.58 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.58 lb/hr
CO	0.49 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.49 lb/hr
VOC (from fuel burning)	0.03 lb/hr	06-096 CMR 140, BPT (A-29-70-A-I)	0.03 lb/hr
VOC (from coatings)	2.9 lb/gal of coating applied	06-096 CMR 123	2.9 lb/gal of coating applied
	39.7 tpy	06-096 CMR 140, BPT (A-29-70-E-A)	39.7 tpy

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 10% opacity on a six (6) minute block average basis, except for not more than one (1) six (6) minute block avg in a 3-hour period *
	No greater than 10% opacity on a six (6) minute block average basis, except for not more than one (1) six (6) minute block avg in a 3-hour period	06-096 CMR 140, BPT (A-29-70-A-I)	

Table Notes: * streamlining requested

Emissions from #2 Coater and #20 Coater combined are limited to 139.7 tpy.

3. Emission Limit Compliance Methods

SDW shall keep certifications stating all coatings used on #2 Coater have an applied VOC content less than 2.9 pounds of VOC per gallon of coating excluding water and exempt compounds.

Compliance with the emission limits associated with #2 Coater and 4th Zone Dryer shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

4. Compliance Assurance Monitoring

CAM is not applicable to the #2 Coater and 4th Zone Dryer.

5. Periodic Monitoring

SDW shall monitor and record the following for #2 Coater and 4th Zone Dryer as indicated in the following table.

#2 Coater and 4th Zone Dryer			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
fuel use (#2 Coater & all assc dryers combined)	scf	Fuel flow meter	Monthly and 12-month rolling total
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC emitted	tons	Calculations	Monthly & 12-month rolling total

6. Parameter Monitoring

There are no parameter monitors for #2 Coater and 4th Zone Dryer.

7. CEMS and COMS

There are no CEMS or COMS required for #2 Coater and 4th Zone Dryer.

M. #20 Coater, Associated Dryers, and Catalytic Incinerator

SDW operates #20 Coater for coating paper produced at the mill. In 2013, #20 Coater underwent an improvement project to replace the previous rod/blade coating process with an air knife system. The coater now has two air knives, one existing and the second installed in 2013, each equipped with its own wet scrubber. This change was addressed in NSR Amendment A-29-77-4-A.

The #20 Coater is subject to Paper Coating Regulation 06-096 CMR 123. Section 3(A) of this rule requires that, when operating uncontrolled, the coater shall not emit VOC in excess of 2.9 pounds per gallon of coating.

In 2010 SDW replaced the burner in the 7th Zone Dryer on #20 in NSR Amendment A-29-77-2-M. The new burner fires natural gas and has a design heat input of 4.0 MMBtu/hr.

In 2013 SDW converted the Floatation Dryer on #20 Coater from steam heat to two (2) 4.0 MMBtu/hr natural gas-fired burners. This change was addressed in NSR Amendment A-29-77-4-A.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   SDW is subject to 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating.* The 2013 #20 Coater improvement project did not reach the threshold to be considered a reconstruction. Therefore, #20 Coater is considered an existing affected source subject to all applicable requirements of Subpart JJJJ.

2. Control Equipment

   The new air knife applicator is equipped with a two-stage wet scrubber. The older, existing air knife applicator is equipped with a one-stage scrubber. The respective wet scrubber is used when any coating grade is applied by an air knife applicator.

   Section 3(B) of 06-096 CMR 123 requires that if the coater is to apply coatings containing greater than 2.9 pounds of VOC per gallon of coating, the coater must be operated in conjunction with an add-on air pollution control device that will reduce VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC per gallon of solids applied.

   The #20 Coater utilizes a catalytic incinerator to control VOC emissions from an air knife applicator when running grades of coating with greater than 2.9 pounds of VOC per gallon of coating in that air knife. The catalytic incinerator was manufactured by ARI International in 1990 and has an auxiliary fuel heat input capacity of 5.0 MMBtu/hr firing natural gas.

   The air stream from the air knife wet scrubber is also tied into the catalytic incinerator so that the wet scrubber exhaust is also controlled by the catalytic incinerator when running coatings containing 2.9 pounds of VOC per gallon of coating or more on the particular air knife. Per 06-096 CMR 123 the catalytic incinerator must reduce VOC emissions by 95% or to a rate equal to 4.8 pounds of VOC emitted per gallon of solids applied. SDW is not required to operate the catalytic incinerator when #20 Coater is applying coatings containing less than 2.9 pounds of VOC per gallon.

   Catalyst attrition (catalyst wearing) leads to higher emissions of particulate matter from the catalytic incinerator than would be otherwise expected from the firing of natural gas and process gases. PM emission limits for the catalytic incinerator are based on previous stack testing results.

3. Emission Limits and Streamlining

For #20 Coater and associated dryers, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

7th Zone Dryer			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.12 lb/MMBtu	06-096 CMR 103 §2(B)(1)(a)	0.05 lb/MMBtu *
	0.05 lb/MMBtu	06-096 CMR 140, BPT	
	0.03 lb/hr	06-096 CMR 115, BACT (A-29-77-2-M)	0.03 lb/hr
PM_{10}	0.03 lb/hr	06-096 CMR 115, BACT (A-29-77-2-M)	0.03 lb/hr
SO_2	0.003 lb/hr	06-096 CMR 115, BACT (A-29-77-2-M)	0.003 lb/hr
NO_X	0.40 lb/hr	06-096 CMR 115, BACT (A-29-77-2-M)	0.40 lb/hr
CO	0.3 lb/hr	06-096 CMR 115, BACT (A-29-77-2-M)	0.3 lb/hr
VOC	0.02 lb/hr	06-096 CMR 115, BACT (A-29-77-2-M)	0.02 lb/hr
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 10% opacity on a 6-min block avg, except for no more than one (1) six (6) min block avg in a 3-hr period *
	No greater than 10% opacity on a 6-min block avg, except for no more than one (1) six (6) min block avg in a 3-hr period	06-096 CMR 115, BACT (A-29-77-2-M)	

Table Notes: * streamlining requested

Floatation Dryers			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	0.12 lb/MMBtu	06-096 CMR 103 §2(B)(1)(a)	0.05 lb/MMBtu *
	0.05 lb/MMBtu	06-096 CMR 115, BACT (A-29-77-4-A)	
	0.40 lb/hr	06-096 CMR 115, BACT (A-29-77-4-A)	0.40 lb/hr
PM_{10}	0.40 lb/hr	06-096 CMR 115, BACT (A-29-77-4-A)	0.40 lb/hr
NO_X	0.78 lb/hr	06-096 CMR 115, BACT (A-29-77-4-A)	0.78 lb/hr
CO	0.65 lb/hr	06-096 CMR 115, BACT (A-29-77-4-A)	0.65 lb/hr

Table Notes: * streamlining requested

#20 Coater			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
VOC (for aqueous coatings)	2.9 lb/gal of coating applied	06-096 CMR 123	2.9 lb/gal of coating applied

Catalytic Incinerator			
Pollutant	**Applicable Emission Standards**	**Origin and Authority**	**Licensed Emission Limits**
PM	4.0 lb/hr	06-096 CMR 115, BACT (A-29-77-1-M)	4.0 lb/hr
	3.99 tpy	06-096 CMR 115, BACT (A-29-77-1-M)	3.99 tpy
PM_{10}	4.0 lb/hr	06-096 CMR 115, BACT (A-29-77-1-M)	4.0 lb/hr
SO_2	0.006 lb/hr	06-096 CMR 115, BACT (A-29-77-1-M)	0.006 lb/hr
NO_X	1.0 lb/hr	06-096 CMR 115, BACT (A-29-77-1-M)	1.0 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
CO	1.8 lb/hr	06-096 CMR 115, BACT (A-29-77-1-M)	1.8 lb/hr
VOC	Reduce overall VOC emissions by at least 95% or to a rate equal to or less than 4.8 lb/gal of solids applied	06-096 CMR 123	Reduce overall VOC emissions by at least 95% or to a rate equal to or less than 4.8 lb/gal of solids applied
Visible Emissions	No greater than 30% opacity on a 6-min block avg, except for no more than two (2) six (6) min block avg in a 3-hr period	06-096 CMR 101 §2(B)(1)(f)	No greater than 20% opacity on a 6-min block avg when the coater is running ETL coating and 10% opacity on a 6-min avg when running any other coating. *
	No greater than 20% opacity on a 6-min block avg when the coater is running ETL coating and 10% opacity on a 6-min avg when running any other coating.	06-096 CMR 140, BPT (A-29-70-A-I)	

Table Notes: * streamlining requested

Emissions from #2 Coater and #20 Coater combined are limited to 139.7 tpy.

4. Emission Limit Compliance Methods

For coatings containing less than 2.9 lbs of VOC per gallon used on #20 Coater, SDW shall keep certifications stating these coatings have an applied VOC content less than 2.9 pounds of VOC per gallon of coating excluding water and exempt compounds.

Compliance with the annual PM emission limit shall be based on the amount of catalyst attrition in that time period determined using a mass balance approach.

To demonstrate compliance with the VOC emission limits (including capture and control efficiency) for the catalytic incinerator, SDW shall perform emissions testing every other year (by 12/31/14) on the catalytic incinerator in accordance with 06-096 CMR 126 while running coatings containing greater

than 2.9 pounds of VOC per gallon of coating, excluding water and exempt compounds, on an air knife.

Compliance with all other emission limits for the dryers associated with #20 Coater shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to #20 Coater. For VOC #20 Coater does have emission limits, a control device to meet the limits, and pre-control emissions greater than 100 ton/year. However, #20 Coater is subject to 40 CFR Part 63, Subpart JJJJ which was proposed after November 15, 1990. The CAM regulation 40 CFR Part 64, §64.2(b)(1)(i) specifies an exemption from CAM requirements for any emission units subject to emission limitations or standards in a NSPS or NESHAPs regulation proposed by the Administrator after November 15, 1990.

6. Periodic Monitoring

SDW shall monitor and record the following for #20 Coater and its associated dryers and air pollution control equipment as indicated in the following tables.

#20 Coater and associated dryers			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Fuel Use (for #20 Coater, assc dryers, & Cat Incin. combined)	scf	Fuel flow meter	Monthly and 12-month rolling total
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC Emitted (post control if applicable)	tons	calculations	Monthly and 12-month rolling total

Wet Scrubbers		
Item to be Monitored	**Monitor**	**Record**
Flow Switches	Continuously	Once per shift

Catalytic Incinerator			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Coating being used on #20 Coater at time of operation	coating type	Logbook	As occurs
Dates of catalyst bed changes	date	Logbook	As occurs
Amount of catalyst added/removed	lbs	Logbook	As occurs
Inlet temperature	Degrees Fahrenheit	Thermocouple	Monitor: Continuously Record: Continuously
Exhaust temperature	Degrees Fahrenheit	Thermocouple	Monitor: Continuously Record: Continuously
Temp rise across bed	Degrees Fahrenheit	N/A	Monitor: Continuously Record: Continuously
VOC emissions	tons	calculations	Monthly & 12-month rolling total

7. Parameter Monitoring

There are no parameter monitors for #20 Coater, its associated dryers, or the catalytic incinerator.

8. CEMS and COMS

There are no CEMS or COMS required for #20 Coater, its associated dryers, or the catalytic incinerator.

N. #9 Paper Machine and On-Line Coater

SDW operates #9 Paper Machine which was manufactured by Beloit, most recently rebuilt in 1963, and has a production rate of approximately 185 tons of paper per day (tons/day). The raw materials used by the paper machine are pulp and paper making additives.

No. 9 Paper Machine is equipped with an on-line coater which uses aqueous based paper coatings only. Therefore, #9 Paper Machine's on-line coater is subject to 06-096 CMR 123.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

   The #9 Paper Machine is an on-machine coater. On-machine coaters were determined in a letter from EPA dated November 19, 2003 to apply materials used to form a substrate and are not subject to the requirements of 40 CFR Part 63, Subpart JJJJ, *National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating.*

2. Emission Limits and Streamlining

   For #9 Paper Machine and its on-line coater, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC	2.9 lb/gal of coating applied	06-096 CMR 123	2.9 lb/gal of coating applied
	40.0 tpy	06-096 CMR 140, BPT	40.0 tpy

3. Emission Limit Compliance Methods

   SDW shall keep certifications stating all coatings used on #9 Paper Machine's on-line coater have an applied VOC content less than 2.9 pounds of VOC per gallon of coating excluding water and exempt compounds.

4. Compliance Assurance Monitoring

   CAM is not applicable to the #9 Paper Machine.

5. Periodic Monitoring

   SDW shall monitor and record the following for #9 Paper Machine and its on-line coater as indicated in the following table.

#9 Paper Machine and On-Line Coater			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC emitted	tons	calculations	Monthly & 12-month rolling total

6. Parameter Monitoring

There are no parameter monitors for #9 Paper Machine.

7. CEMS and COMS

There are no CEMS or COMS required for #9 Paper Machine.

O. Bulk Handling Systems

SDW operates several bulk handling systems for transport of starch and clay from railcars to onsite storage silos and then from these storage silos to handling areas.

Starch Pneumatic Conveyor #1 has a capacity of 41 tons of material per hour (tons/hr) and utilizes a baghouse for particulate control. Starch Pneumatic Conveyor #2 has a capacity of 18 tons/hr and utilizes a wetted cyclone for particulate control. Clay Pneumatic Conveyor #1 has a capacity of 36 tons/hr and utilizes a baghouse for particulate control. Clay Pneumatic Conveyor #2 has a capacity of 24 tons/hr and utilizes a baghouse and a wet scrubber.

The particulate control devices are designed to control visible emissions to no greater than 5% opacity. The baghouses are of the pulse-jet type and have rated efficiencies of 99.9%.

A scrubber handles exhaust from three Cowles mixers and four kettle tanks and has a rated efficiency of 98% and can handle 10,000 cfm of air.

SDW shall establish an inspection/maintenance plan for the bulk handling systems. The plan shall provide for periodic inspection and for record keeping of inspection findings and maintenance or repairs done on the equipment.

1. Emission Limits and Streamlining

For all Bulk Handling Systems a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
Visible Emissions (baghouses)	10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.	06-096 CMR 101, §2(B)(3)(c)	10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.
Visible Emissions (equipment other than baghouses)	20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.

2. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Bulk Handling Systems baghouses shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Unit of Emission Limit	Compliance Method	Frequency
Visible Emissions	Opacity	Method 9 Observations	As requested

3. Compliance Assurance Monitoring

CAM is not applicable to the Bulk Handling Systems.

4. CEMS and COMS

There are no CEMS or COMS required for the Bulk Handling Systems and associated control equipment.

P. Ash Loading System

SDW utilizes an ash loading system to handle fly ash generated from the operation of Boiler #21. The system was manufactured in 1982 and loads an average of approximately 100 tons/day of fly ash from the silo into trucks.

The system stores the ash in a silo until it is transferred to either the wet or dry ash loading areas where it is loaded onto trucks for removal from the facility. Small amounts of conditioned fly ash may be placed in the Blending Building for operational purposes.

Trucks pull into a loading bay in the Boiler #21 building for wet ash loading. The wet ash system wets the ash before loading to control the particulate emissions.

The dry ash system utilizes a loading station that is outside of the Boiler #21 building. Particulate emissions are controlled with a pulse jet baghouse for dry ash loading.

1. Emission Limits and Streamlining

For the Ash Loading System a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
Visible Emissions (dry ash system)	10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.	06-096 CMR 101, §2(B)(3)(c)	10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.
Visible Emissions (wet ash system)	20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.	06-096 CMR 101, §2(B)(3)(d)	20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period.

2. Emission Limit Compliance Methods

Compliance with the emission limits associated with the Ash Loading System shall be demonstrated in accordance with the methods and frequencies

indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Unit of Emission Limit	Compliance Method	Frequency
Visible Emissions	Opacity	Method 9 Observations	As requested

3. Compliance Assurance Monitoring

CAM is not applicable to the Ash Loading System.

4. Periodic Monitoring

SDW shall monitor and record the following for the dry Ash Loading System as indicated in the following table.

Dry Ash Loading Systems			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Baghouse Pressure Drop	inches of water	Pressure Gauges (inlet & outlet)	Once per shift (when in operation)
Maintenance activity records	Each	Record in logbook	Maintain records documenting maintenance activities performed on the dry ash system baghouse and wet ash system water sprays.

5. Parameter Monitoring

There are no parameter monitors for the Ash Loading System.

6. CEMS and COMS

There are no CEMS or COMS required for the Ash Handling System and associated control equipment.

Q. Storage Tanks

SDW utilizes several storage tanks for the storage of liquid organic material. These tanks include a 100,000 gallon #2 fuel oil tank, a 500,000 gallon #6 fuel oil

tank and a 3,000 gallon split gasoline/diesel tank manufactured in 1988, 1973, and 2014 respectively. SDW has several smaller storage tanks for diesel fuel, #2 fuel oil and LPG that are considered insignificant because of their size.

1. New Source Performance Standards (NSPS)

   The 100,000 gallon #2 fuel oil tank is not subject to the NSPS titled *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978,* 40 CFR 60, Subpart K. It is also not subject to the NSPS titled *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984,* 40 CFR 60, Subpart Ka. Both Subparts K and Ka exclude #2 fuel oil from their definition of *petroleum liquid*.

   The true vapor pressure of #2 fuel oil is less than 0.7 kPa (0.1 psi) at ambient temperatures, which is below the applicability threshold of 3.5 kPa for the NSPS titled *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984,* 40 CFR 60, Subpart Kb. Therefore, the 100,000 gallon #2 fuel oil tank is not subject to Subpart Kb.

   NSPS 40 CFR 60, Subparts K and Ka exclude #6 fuel oil from their definition of *petroleum liquid*, therefore the 500,000 gallon #6 fuel oil tank is not subject to Subparts K and Ka. The 500,000 gallon #6 fuel oil tank was manufactured prior to 40 CFR 60, Subpart Kb's applicability date of July 23, 1984. Therefore, the 500,000 gallon #6 fuel oil tank is not subject to Subpart Kb.

   The 3,000 gallon split gasoline/diesel tank is below the capacity threshold for applicability to 40 CFR 60, Subparts K, Ka and Kb. This tank is subject to the submerged fill pipe requirement 06-096 CMR 118, Section 4(A) on gasoline dispensing vapor control. The facility is also subject to the record keeping requirements per 06-096 CMR Chapter 118, Section 10(B).

2. Compliance Assurance Monitoring

   CAM is not applicable to the Storage Tanks.

3. Periodic Monitoring

   Periodic monitoring for the 3,000 gallon split gasoline/diesel tank shall include record keeping in accordance with 06-096 CMR 118.

4. Parameter Monitoring

There are no parameter monitors for the storage tanks.

R. Waste Water Treatment Plant

SDW operates a wastewater treatment plant to treat all the process wastewater generated from mill drains and processes. SDW is required by the federal Clean Water Act to comply with their Maine Pollution Discharge Elimination System (MPDES) permit. By maintaining a valid MPDES permit, SDW's wastewater treatment facility meets 06-096 CMR 134 VOC RACT standards.

S. Parts Washers

SDW operates several ZEP parts washers (degreaser units) as part of their maintenance activities. Based on the solvent used, they are subject to *Solvent Cleaners,* 06-096 CMR 130 (as amended).

Periodic monitoring for the parts washers shall consist of recordkeeping including records of solvent added and removed.

T. Ultracast Roll Cleaning

Ultracast rolls use pressure to impart a texture to certain grades of paper. They must be cleaned occasionally to remove buildup.

Ultracast rolls are mounted in a box. The mount is equipped with a motor to rotate the roll as it sits in the box. Solvent, comprised primarily of methylene chloride, is applied to the roll using a paint brush.

After the solvent is applied, the lid of the box is closed and the roll sits in the box for approximately 30-45 minutes. Fumes from the box are captured in a ventilation hood and exhausted outside the building.

After the solvent has had a chance to work, the roll is pressure-washed with water while still in the box and the rinse water put to the mill's sewer via a drain in the bottom of the box. If stained, the roll may be wiped with bleach. Finally, the roll is wiped with methanol and allowed to air dry.

1. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The Ultracast Roll Cleaning process is not subject to *National Emission Standards for Halogenated Solvent Cleaning* contained in 40 CFR Part 63,

Subpart T. The boxes used in the Ultracast Roll Cleaning process do not constitute solvent cleaning machines as defined. The solvent is applied by paint brush which is considered wipe cleaning, an exempt activity under this regulation.

2. State Regulations

The Ultracast Roll Cleaning process is not subject to 06-096 CMR 130, *Solvent Cleaners*. The solvent is applied by paint brush which is considered wipe cleaning, an exempt activity under this regulation.

3. Emission Limits and Streamlining

BPT for the Ultracast Roll Cleaning process is use of solvent containing 10% or less VOCs and limiting emissions of VOC to 2.0 tpy or less.

4. Periodic Monitoring

Periodic monitoring for the Ultracast Roll Cleaning process shall consist of recordkeeping including records of solvent used and the Safety Data Sheets (SDS) for the solvent.

U. Facility Annual Emissions

1. Total Annual Emissions

SDW is licensed for the following annual emissions based on the following:

- PM/PM_{10} levels for Boilers #17, #18, and #21 are based on operation of Boiler #21 at 100% for 8760 hrs/year plus operation of Boilers #17 and #18 for 876 hrs/year (10% capacity).
- All other pollutants for Boilers #17, #18, and #21 are based on combined permitted not to exceed numbers as these are lower than the calculation method stated above.
- Operation of the Generators for 100 hr/year each
- 10% annual capacity factor for the Technology Center Boiler
- Maximum operation of the Coaters, Associated Dryers, and Catalytic Incinerator

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	**PM_{10}**	**SO_2**	**NO_x**	**CO**	**VOC**
Boilers #17, #18, & #21 (combined)	411.0	411.0	3,763.5	1,787.6	2,822.5	179.0
Generator #1	neg	neg	neg	0.6	0.1	0.1
Generator #2	neg	neg	neg	0.4	0.1	neg
Generator #3	neg	neg	neg	0.2	neg	neg
Generator #4	neg	neg	neg	0.1	neg	neg
Generator #5	neg	neg	neg	0.2	0.4	neg
Technology Center Boiler	0.1	0.1	neg	0.3	0.2	0.1
#35 Research Coater	–	–	–	–	–	
#35 Research Coater Dryer	2.9	2.9	neg	5.5	4.6	0.3
#2 Coater 4th Zone Dryer	1.3	1.3	neg	2.6	2.1	0.1
#20 Coater Floatation & 7th Zone Dryers	2.6	2.6	neg	5.1	4.3	0.3
Catalytic Incinerator	4.0	4.0	neg	4.4	7.8	–
#2 & #20 Coaters (Combined)	–	–	–	–	–	139.7
#9 Paper Machine	–	–	–	–	–	40.0
Ultracast Roll Cleaning	–	–	–	–	–	2.0
Total TPY	**421.9**	**421.9**	**3,763.5**	**1,807.0**	**2,842.1**	**361.6**

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

Based on the facility's fuel use, the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, SDW is above the major source threshold of 100,000 tons of CO_2e per year.

III. AMBIENT AIR QUALITY ANALYSIS

SDW previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-29-71-AB-M, issued on 7/17/97). An additional ambient air quality analysis is not required for this Part 70 License.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-29-70-I-R pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to SDW pursuant to the Department's preconstruction permitting requirements in 06-096 CMR 108 or 115 have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both; [06-096 CMR 140]

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [06-096 CMR 140]

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 140]

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license; [06-096 CMR 140]

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 140]

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in their renewal application.

Source	Citation	Description	Basis for Determination
Facility	06-096 CMR 132	Graphic Arts-Rotogravure and Flexography	No applicable sources at the facility
All Coaters	06-096 CMR 134	VOC RACT	The Coaters are already subject to RACT per 06-096 CMR 123.
Catalytic Incinerator	06-096 CMR 134	VOC RACT	The catalytic incinerator is already subject to RACT per 06-096 CMR 123.
#9 Paper Machine	06-096 CMR 134	VOC RACT	Exempt per 06-096 CMR 134, Section (1)(C)(7)
Tech. Center Boiler	06-096 CMR 138	NO_x RACT	Potential NO_x emissions <10 tpy.
All Coater Dryers	06-096 CMR 138	NO_x RACT	Each dryer has potential NO_x emissions <10 tpy
Diesels #1- #4	06-096 CMR 138	NO_x RACT	Diesels #1 - #4 are emergency standby engines limited to 500 hrs/year.
Boilers #17 & #18	06-096 CMR 145	NO_x Control Program	Maximum heat input for each boiler less than 250 MMBtu/hr
Boiler #21	06-096 CMR 145	NO_x Control Program	<50% of the annual heat input for Boiler #21 comes from fossil fuels
Facility	06-096 CMR 161	Graphic Arts-Offset Lithography and Letterpress Printing	No applicable sources at the facility
Boilers #17 & #18	40 CFR 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	Constructed prior to applicability date
Boiler #21	40 CFR 60, Subpart Db	NSPS for Industrial-Commercial-Institutional Steam Generating Units	Constructed prior to applicability date

Source	Citation	Description	Basis for Determination
Tech. Center Boiler	40 CFR 60, Subpart Dc	NSPS for Small Industrial-Commercial-Institutional Steam Generating Units	Maximum heat input <10 MMBtu/hr
Facility	40 CFR 60, Subpart RR	Pressure Sensitive Tape and Labeling Surface Coating	No applicable sources at this facility
#20 Coater Incinerator	40 CFR 60, Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	Unit does not burn solid waste.
#20 Coater	40 CFR 60, Subpart DDDD	Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units	Unit does not burn solid waste.
Emergency Generators #1 - #4	40 CFR 60, Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines	Generators #1 - #4 were all constructed prior to the applicability date.
Emergency Generator #5	40 CFR 60, Subpart JJJJ	NSPS for Spark Ignition Internal Combustion Engines	Generator #5 was constructed prior to the applicability date.
Facility	40 CFR 63, Subpart T	NESHAP for Halogenated Solvent Cleaning	No applicable sources at this facility
All Boilers	40 CFR 63, Subpart JJJJJJ	NESHAP for Area Sources: Industrial/Commercial/ Institutional Boilers	Facility is a major source of HAP.
Facility	40 CFR 64	Compliance Assurance Monitoring	No applicable sources at this facility
Facility	40 CFR Part 98, Subpart II	GHG Reporting for Industrial Wastewater Treatment	Wastewater facility is an aerobic system
All Boilers	40 CFR 60, Subpart CCCC	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	The boilers do not burn solid waste.
All Boilers	40 CFR 60, Subpart DDDD	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	The boilers do not burn solid waste.

Source	Citation	Description	Basis for Determination
Building 86, Building 151, & Building 4 heating systems	40 CFR 63, Subpart DDDDD	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Systems are exempt hot water heaters and space heaters.
All Coater Dryers and Catalytic Incinerator	40 CFR 63, Subpart DDDDD	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Units do not meet the definition of process heaters.

[06-096 CMR 140]

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 CMR 140;

B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 CMR 140]

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar

programs or processes for changes that are provided for in the Part 70 license. [06-096 CMR 140]

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140. [06-096 CMR 140]

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 140]
Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. §353-A.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 140]
Enforceable by State-only

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 CMR 140]

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an

application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 CMR 140]

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:

1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

2. to demonstrate compliance with the applicable emission standards; or

3. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 140]

Enforceable by State-only

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that

there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 140]

Enforceable by State-only

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 CMR 140]

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such

monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 CMR 140]

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
B. The compliance status;
C. Whether compliance was continuous or intermittent;
D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
E. Such other facts as the Department may require to determine the compliance status of the source.

[06-096 CMR 140]

SPECIFIC CONDITIONS

(14) **Boiler #21**

A. Allowable Fuels

1. Boiler #21 is licensed to fire biomass (e.g. wood chips, bark, waste paper, wood waste, sludge, and CDD), coal, #6 fuel oil, #2 fuel oil, and specification and off-specification waste oil. CDD is defined by, and shall be used in accordance with, 06-096 CMR 418.
   [06-096 CMR 140, BPT (A-29-70-G-A) and 06-096 CMR 418] **Enforceable by State-only**
2. Boiler #21 is also licensed to fire oily secondary material. Oily secondary material includes oily rags and oil-soaked absorbent materials that have been generated on site from maintenance and spill cleanup activities.
   [06-096 CMR 115, BACT (A-29-77-3-M)]
3. The oily secondary material fired in Boiler #21 shall not exceed the constituent/property allowable levels for off-specification waste oil contained in the Department's *Waste Oil Management Rules*, 06-096 CMR 850 (as amended). Compliance with this requirement shall be demonstrated through sampling and analysis of a representative sample of

waste oil typically contained in the oily secondary material on an annual basis. [06-096 CMR 115, BACT (A-29-77-3-M)]

4. SDW shall maintain records of the quantity of fuel consumed in Boiler #21 on a monthly and 12-month rolling total basis.
   [06-096 CMR 140, BPT (A-29-70-A-I)]

B. Fuel Sulfur Content

1. #6 fuel oil
   a. Until December 31, 2017 or the date specified in 38 MRSA §603-A(2)(A)(1) and (2), the sulfur content of the #6 fuel oil fired shall not exceed 2.0% by weight. [06-096 CMR 106]
   b. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(1) and (2), the #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight.
      [38 MRSA §603-A(2)(A)(1) and (2)]
2. #2 fuel oil
   a. Until June 30, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight).
      [06-096 CMR 140, BPT]
   b. Beginning July 1, 2016 or on the date specified in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm)
      [38 MRSA §603-A(2)(A)(3)].
   c. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(3), #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm).
      [38 MRSA §603-A(2)(A)(3)]
3. Sulfur Content Compliance
   Sulfur content compliance for oil and coal shall be demonstrated by fuel delivery receipts. [06-096 CMR 140, BPT (A-29-70-A-I)]

C. Boiler #21 Emission Limits

1. Emissions from Boiler #21 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.08	06-096 CMR 140, BACT (#1615, Amendment #1)	Federally Enforceable
PM_{10}	0.08	06-096 CMR 140, BPT (A-29-71-C-A/R)	**Enforceable by State-only**

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
SO_2 (firing oil w/o coal) See Note 1	0.8 (3-hr block avg)	40 CFR Part 60, Subpart D, §60.43(a)(1)	Federally Enforceable
SO_2 (firing coal alone or with other fuels) See Note 2	0.96 (3-hr block avg)	06-096 CMR 106, §2(B)(2)	Federally Enforceable
SO_2 (firing any fuel(s))	0.8 (30-day rolling avg)	06-096 CMR 140, BPT (A-29-70-A-I)	Federally Enforceable
NO_x (firing oil w/o coal) See Note 1	0.30 (3-hr block avg)	40 CFR Part 60, Subpart D, §60.44(a)(2)	Federally Enforceable
NO_x (firing coal alone or with other fuels) See Note 2	0.38 (24-hr block avg)	06-096 CMR 138, §3(B)(4)&(8)	Federally Enforceable
NO_x (firing coal alone or with other fuels) See Note 2	0.70 (3-hr block avg)	40 CFR Part 60, Subpart D, §60.44(a)(3)	Federally Enforceable

Note 1: For periods that oil is fired alone or in conjunction with other licensed fuels except coal.

Note 2: For periods that coal is fired alone or in conjunction with other licensed fuels.

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	85.9	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
PM_{10}	85.9	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
SO_2 (firing oil w/o coal) See Note 1	859.2	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
SO_2 (firing coal alone or with other fuels) See Note 2	1,031.0	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**

Pollutant	lb/hr	Origin and Authority	Enforceability
NO_x (firing oil w/o coal) See Note 1	322.2	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
NO_x (firing coal alone or with other fuels) See Note 2	751.8	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
CO	644.4	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
VOC	40.8	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**

Note 1: For periods that oil is fired alone or in conjunction with other licensed fuels except coal.

Note 2: For periods that coal is fired alone or in conjunction with other licensed fuels.

2. Visible emissions from Boiler #21 shall not exceed 20% opacity on a six (6) minute block average basis, except no more than one (1) six minute period per hour of not more than 27% opacity except for periods of startup and shutdown. [40 CFR Part 60, Subpart D, §60.42(a)(2)]

D. Particulate matter (PM, PM_{10}) emissions from Boiler #21 shall be controlled by the operation and maintenance of a multiclone followed by an electrostatic precipitator (ESP). During normal operation, SDW shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emission limits. During periods of ESP malfunction or maintenance, SDW shall operate a minimum of five fields of the ESP.

Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Air Emission Compliance Test Protocol, SDW may perform additional particulate emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstances shall SDW be relieved of its obligation to meet its licensed emission limits
[06-096 CMR 140, BPT]

E. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

Pollutant	Unit of Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 CFR Part 60, App. A, Method 5	Once every five years (by 12/31/17).
	lb/hr		
PM_{10}	lb/MMBtu	40 CFR Part 60, App. A, Method 5	As requested
	lb/hr		
SO_2	lb/MMBtu	SO_2 CEMS on a 3-hour block average	Continuous (in accordance with 40 CFR Part 60, App. B)
	lb/hr	40 CFR Part 60, App. A, Method 6	As requested
NO_X	lb/MMBtu	NO_x CEMS on a 3-hour or 24-hour block average basis (midnight to midnight) as required	Continuous (in accordance with 40 CFR Part 60, App. B)
	lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	lb/hr	40 CFR Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 CFR Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% Opacity	COMS on a 6-minute block average basis	Continuous (in accordance with 40 CFR Part 60, App. B)

F. Periodic Monitoring

SDW shall monitor and record the following for Boiler #21 and its associated air pollution control equipment as indicated in the following tables. [06-096 CMR 140, BPT]

Boiler #21			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Solid Fuel Use	Tons	Conveyor belt scales or purchase records	Monthly and 12-month rolling total
Liquid Fuel Use	Gallons	Fuel flow meters or purchase records	Monthly and 12-month rolling total
Liquid Fuel Sulfur Content	Percent by weight	Fuel receipts from supplier	As fuel is received

Item to be Monitored	Units of Measure	Monitoring Tool/Method	Frequency
Waste Oil Added to #6 Oil Tank	Gallons	Written Records	Monthly and 12-month rolling total
Waste Oil Type	N/A	Written Records	Documentation that the waste oil fired meets the definition of "specification" or "off-specification" waste oil.
Oily Secondary Material Fired	Tons	Written Records	Monthly and 12-month rolling total

Multiclone on Boiler #21			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Gas pressure drop across Multiclone	Pounds per square inch (gauge) or inches of water	Pressure gauges	Monitor: Continuously Record: Once per shift

ESP on Boiler #21			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Secondary Voltage	Volts or kilovolts	Volt meter	Monitor: Continuously Record: Once per shift

G. CEMS and COMS

SDW shall operate and maintain the following continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS) for Boiler #21:

Pollutant and Continuous Monitor	Unit of Measurement	Origin and Authority
NO_X CEMS	lb/MMBtu	06-096 CMR 117, 06-096 CMR 138, and 40 CFR 60, Subpart D §60.45(a)
SO_2 CEMS	lb/MMBtu	40 CFR 60, Subpart D §60.45(a)
CO_2 CEMS	ppm	40 CFR 60, Subpart D §60.45(a)
Opacity COMS	%	06-096 CMR 117 and 40 CFR 60, Subpart D §60.45(a)

H. Federal Regulations

1. Boiler #21 is subject to 40 CFR Part 60, Subpart D, and SDW shall comply with all applicable requirements thereof.

2. Boiler #21 is subject to 40 CFR Part 63, Subpart DDDDD, and SDW shall comply with all applicable requirements thereof.

(15) **Boilers #17 & #18**

A. Allowable Fuels

1. Boilers #17 & #18 are licensed to fire #6 fuel oil, #2 fuel oil (for startup purposes only), and specification and off-specification waste oil. [06-096 CMR 140, BPT] **Enforceable by State-only**
2. Boilers #17 & #18 shall each not fire more than 1,162,160 gallons of #6 oil per year, which limits Boilers #17 and #18 to an annual capacity factor of 10% based on a calendar year basis. [06-096 CMR 140, BPT]
3. SDW shall maintain records of the quantity of fuel consumed in Boilers #17 & #18 on a monthly and 12-month rolling total basis. [06-096 CMR 140, BPT (A-29-70-A-I)]

B. Fuel Sulfur Content

1. #6 fuel oil
   a. Until December 31, 2017 or the date specified in 38 MRSA §603-A(2)(A)(1) and (2), the sulfur content of the #6 fuel oil fired shall not exceed 2.0% by weight. [06-096 CMR 106]
   b. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(1) and (2), the #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight. [38 MRSA §603-A(2)(A)(1) and (2)]
2. #2 fuel oil
   a. Until June 30, 2016 or the date specified in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). [06-096 CMR 140, BPT]
   b. Beginning July 1, 2016 or on the date specified in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)].
   c. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(3), #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]

3. Sulfur Content Compliance
   Sulfur content compliance for oil shall be demonstrated by fuel delivery receipts. [06-096 CMR 140, BPT (A-29-70-A-I)]

C. Boilers #17 & #18 Emission Limits

1. Emissions from Boilers #17 & #18 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	06-096 CMR 103, §2.A(1)	Federally Enforceable
NO_x	0.30 (1-hr avg)	06-096 CMR 138, §3.B(1)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	39.8	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
PM_{10}	39.8	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
SO_2	418.2	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
NO_x	59.7	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
CO	6.6	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
VOC	1.7	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**

2. When both Boilers #17 & #18 are operating, visible emissions from the combined stack shall not exceed 40% opacity on a six (6) minute block average basis, except no more than three (3) six (6) minute block averages in a 2-hr period except for periods of startup and shutdown. [06-096 CMR 101, §2(B)(6)(b)]

3. When either Boiler #17 or Boiler #18 are operating alone, visible emission from the combined stack shall not exceed 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hr period except for periods of startup and shutdown. [06-096 CMR 101, §2(B)(6)(a)]

D. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

Pollutant	**Unit of Emission Limit**	**Compliance Method**	**Frequency**
PM	lb/MMBtu lb/hr	40 CFR Part 60, App. A, Method 5	As requested
PM_{10}	lb/hr	40 CFR Part 60, App. A, Method 5	As requested
SO_2	lb/hr	40 CFR Part 60, App. A, Method 6	As requested
NO_X	lb/MMBtu lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	lb/hr	40 CFR Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 CFR Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% Opacity	40 CFR Part 60, App. A, Method 9	As requested

E. Periodic Monitoring

SDW shall monitor and record the following for Boilers #17 & #18 as indicated in the following table. [06-096 CMR 140, BPT]

Boilers #17 and #18			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
#6 fuel oil use (#17 & #18 individually)	Gallons	Fuel flow meter	Monthly and calendar year total
#6 fuel oil sulfur content	Percent by weight	Fuel receipts from supplier	As fuel is received
#2 fuel oil use (both #17 & #18 combined)	Gallons	Fuel flow meter	Monthly and calendar year total
#2 fuel oil sulfur content	Percent by weight	Fuel receipts from supplier	As fuel is received
Capacity Factor	%	Log	Annual on a calendar year basis

F. Federal Regulations

1. Boilers #17 & #18 are subject to 40 CFR Part 63, Subpart DDDDD, and SDW shall comply with all applicable requirements thereof.

(16) **Additional Requirements for Boilers #21, #17, and #18**

A. Total annual emission from Boilers #21, #17, and #18 combined shall not exceed the following:

Pollutant	Tons/Year
PM	411.0
PM_{10}	411.0
SO_2	3,763.5
NO_x	1,787.6
VOC	179.0

[06-096 CMR 140, BPT (A-29-71-AG-M)] **Enforceable by State-only**

B. SDW shall keep records to document compliance with Condition (16)(A) on a monthly and 12-month rolling total basis.
[06-096 CMR 140, BPT (A-29-71-G-M)] **Enforceable by State-only**

C. SDW shall calculate annual emissions from Boiler #21 on a 12-month rolling total, updated monthly, based on data from CEMs for SO_2 and NO_x. For PM, PM_{10}, and VOC from Boiler #21, for all other criteria pollutants from Boilers #17 and #18, and for when CEM data is not available for SO_2 and NO_x from Boiler #21, SDW shall calculate annual emissions on a 12-month rolling total, updated monthly, based on fuel consumption using the emission factors in the following tables. [06-096 CMR 140, BPT (A-29-71-AG-M)]
Enforceable by State-only

Boiler #21 Emission Factors				
Pollutant	**Biomass (lb/ton)**	**#6 Fuel Oil (lb/gal)**	**Coal (lb/ton)**	**#2 fuel oil (lb/gal)**
PM	0.72	0.012	2.12	0.0112
PM_{10}	0.72	0.012	2.12	0.0112
SO_2	7.2	0.12	2.73	0.112
NO_x	3.42	0.047	18	0.024
VOC	0.342	0.0016	0.3	0.00056

Boilers #17 & #18 Emission Factors		
Pollutant	**#2 Fuel Oil (lb/gal)**	**#6 fuel oil (lb/gal)**
PM	0.03	0.03
PM_{10}	0.03	0.03
SO_2	0.07	0.11
NO_x	0.045	0.045
VOC	0.0003	0.0013

D. Waste Oil Firing

1. SDW is licensed to fire a combined total of 10,000 gallons per year of specification waste oil and off-specification waste oil in Boilers #21, #17, and #18 based on a 12-month rolling total.
[06-096 CMR 140, BPT (A-29-70-A-I)]

2. SDW shall maintain records of the amount of waste oil added to the #6 fuel oil tank. The records shall include the date and amount of waste oil added and documentation that the waste oil meets the definition of "specification" or "off-specification" waste oil as defined by the Department's Waste Oil Management Rules. Records shall be maintained on a monthly and 12-month rolling total basis.
[06-096 CMR 140, BPT (A-29-70-A-I)]

E. Main Stack Height Reduction
SDW shall be permitted, but is not required, to reduce the height of the main stack (i.e. the combined stack for Boilers #17 & #18) to no lower than 250 feet above ground level if the facility commits to firing only #6 fuel oil with a sulfur content not to exceed 0.7% sulfur by weight. SDW shall provide proof of the fuel oil change through fuel records that include receipts or certification from the fuel oil supplier that indicate sulfur content of the fuel. [06-0–6 CMR 140, BPT (A-29-71-AB-M & A-29-70-A-I)]

(17) **Technology Center Boiler**

A. Allowable Fuels
1. The Technology Center Boiler is licensed to fire natural gas.
[06-096 CMR 140, BPT] **Enforceable by State-only**
2. The Technology Center Boiler shall not exceed an annual capacity factor of 10% based on a calendar year basis, demonstrated by limiting operation to no more than 7.2 MMscf per year. [06-096 CMR 140, BPT]
3. SDW shall maintain records of the total quantity of fuel consumed in the Technology Center (including the Technology Center Boiler and #35

Research Coater and Dryer) and the hours of operation of the Technology Center Boiler on a monthly and calendar year basis.
[06-096 CMR 140, BPT]

B. Technology Center Boiler Emission Limits

1. Emissions from the Technology Center Boiler shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.12	06-096 CMR 103, §2.B(1)(a)	**Enforceable by State-only**

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.1	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
PM_{10}	0.1	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
SO_2	0.005	06-096 CMR 140, BPT	**Enforceable by State-only**
NO_x	0.8	06-096 CMR 140, BPT	**Enforceable by State-only**
CO	0.7	06-096 CMR 140, BPT	**Enforceable by State-only**
VOC	0.04	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**

2. Visible emissions from the Technology Center Boiler shall not exceed 10% opacity on a six (6) minute block average basis.
[06-096 CMR 140, BPT (A-29-70-A-I)]

C. Federal Regulations

The Technology Center Boiler is subject to 40 CFR Part 63, Subpart DDDDD, and SDW shall comply with all applicable requirements thereof.

(18) **Generators #1 - #5**

A. Allowable Fuels and Operation
1. Generators #1-#4 are licensed to fire diesel fuel. [06-096 CMR 140, BPT]
2. Generator #5 is licensed to fire propane. [06-096 CMR 140, BPT]
3. There is no limit on the use of the generators in emergency situations. [06-096 CMR 140, BPT]

B. Fuel Sulfur Content
   1. Until June 30, 2016, or the date specified in 38 MRSA §603-A(2)(A)(3), the diesel fuel fired in Generators #1-#4 shall be ASTM D396 compliant (maximum sulfur content of 0.5% by weight). [06-096 CMR 140, BPT]
   2. Beginning July 1, 2016, or on the date specified in 38 MRSA §603-A(2)(A)(3), the diesel fuel fired in Generators #1-#4 shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
   3. Beginning January 1, 2018, or the date specified in 38 MRSA §603-A(2)(A)(3), the diesel fuel fired in Generators #1-#4 shall not exceed a maximum sulfur content limit of 0.0015 by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
   4. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 140, BPT]

C. Emissions shall not exceed the following limits [06-096 CMR 140, BPT] **Enforceable by State-only**:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (Treatment Plant)	0.34	0.34	1.45	7.43	0.63	0.98
Generator #2 (Rotary Room)	0.23	0.23	0.98	8.42	1.81	0.67
Generator #3 (MacIntosh)	0.08	0.08	0.34	2.95	0.64	0.23
Generator #4 (Feedwater)	0.06	0.06	0.25	2.16	0.47	0.17
Generator #5 (IT)	0.25	0.25	neg	4.77	7.81	0.06

D. Visible emissions from each of the diesel engines (Generators #1-#4) shall not exceed 30% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101, §2(B)(1)(f)]

E. Visible emissions from Generator #5 shall not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101, §2(B)(1)(d)]

F. Generators #1 - #5 shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. No later than May 3, 2013, SDW shall meet the following operational limitations for each of the diesel-fired engines (Generators #1-#4):

   a. Change the oil and filter annually,
   b. Inspect the air cleaner annually, and
   c. Inspect the hoses and belts annually and replace as necessary.

   A log shall be maintained documenting compliance with the operational limitations.

   [40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 140, BPT]

2. No later than October 19, 2013, SDW shall meet the following operational limitations for Generator #5:

   a. Change the oil and filter annually,
   b. Inspect the spark plugs annually, and
   c. Inspect the hoses and belts annually and replace as necessary.

   A log shall be maintained documenting compliance with the operational limitations.

   [40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 140, BPT]

3. Oil Analysis Program Option
   SDW has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, SDW must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR§63.6625(i)]

4. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]

5. Maintenance, Testing, and Non-Emergency Operating Situations

   a. The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or

otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). These limits are based on a calendar year. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §63.6640(f) and 06-096 CMR 140, BPT]

b. SDW shall keep records that include maintenance conducted on the generators and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the SDW must keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

6. Operation and Maintenance
The generators shall be operated and maintained according to the manufacturer's emission-related written instructions, or SDW shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 CFR §63.6625(e)]

7. Startup Idle and Startup Time Minimization
During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
[40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

8. Requirements for Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake hp)
   a. If SDW operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), beginning January 1, 2015, the diesel fuel fired in Generators #1-#4 shall not exceed 15 ppm sulfur (0.0015%). Any existing diesel fuel

purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR §63.6604(b) and 06-096 CMR 140, BPT]

b. If SDW operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

(19) **#35 Research Coater and Dryer**

A. VOC content of the coatings used on the #35 Research Coater shall not exceed 2.9 pounds of VOC per gallon of coating applied. [06-096 CMR 123]

B. The #35 Research Coater Dryer is licensed to fire natural gas. [06-096 CMR 140, BPT] **Enforceable by State-only**

C. #35 Research Coater Dryer Emission Limits

1. Emissions from the #35 Research Coater Dryer shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 CMR 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.65	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
PM_{10}	0.65	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
SO_2	0.01	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
NO_x	1.26	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
CO	1.06	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
VOC	0.07	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**

2. Visible emissions from the #35 Research Coater Dryer shall not exceed 10% opacity on a six (6) minute block average basis. [06-096 CMR 140, BPT (A-29-70-A-I)]

D. Periodic Monitoring

SDW shall monitor and record the following for the #35 Research Coater and Dryer as indicated in the following table. [06-096 CMR 140, BPT]

#35 Research Coater and Dryer			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC emitted	tons	calculations	Monthly & 12-month rolling total

(20) **#2 Coater and 4th Zone Dryer**

A. VOC content of the coatings used on the #2 Coater shall not exceed 2.9 pounds of VOC per gallon of coating applied. [06-096 CMR 123]

B. The #2 Coater 4th Zone Dryer is licensed to fire natural gas. [06-096 CMR 140, BPT] **Enforceable by State-only**

C. #2 Coater and 4th Zone Dryer Emission Limits

1. Emissions from the #2 Coater and 4th Zone Dryer shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 CMR 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.30	06-096 CMR 140, BPT	**Enforceable by State-only**
PM_{10}	0.30	06-096 CMR 140, BPT	**Enforceable by State-only**
SO_2	0.01	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
NO_x	0.58	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
CO	0.49	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**
VOC	0.03	06-096 CMR 140, BPT (A-29-70-A-I)	**Enforceable by State-only**

Pollutant	tpy	Origin and Authority	Enforceability
VOC	39.7	06-096 CMR 140, BPT (A-29-71-AH-A)	Federally Enforceable

2. Visible emissions from the #2 Coater and 4th Zone Dryer shall not exceed 10% opacity on a six (6) minute block average basis, except for not more than one (1) six (6) minute block average in a 3-hr period. [06-096 CMR 140, BPT (A-29-70-A-I)]

D. Periodic Monitoring

SDW shall monitor and record the following for the #2 Coater and 4th Zone Dryer as indicated in the following table. [06-096 CMR 140, BPT]

#2 Coater and 4th Zone Dryer			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
fuel use (#2 Coater & all assc dryers combined)	scf	Fuel flow meter	Monthly & 12-month rolling total
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC emitted	tons	calculations	Monthly & 12-month rolling total

E. Federal Regulations

The #2 Coater is subject to 40 CFR Part 63, Subpart JJJJ, and SDW shall comply with all applicable requirements thereof.

(21) **#20 Coater, Associated Dryers, and Catalytic Incinerator**

A. When running coatings with a VOC content less than or equal to 2.9 pounds of VOC per gallon of coating applied, SDW may operate #20 Coater without the use of the Catalytic Incinerator. [06-096 CMR 123]

B. If #20 Coater is to be operated with a coating containing greater than 2.9 pounds of VOC per gallon of coating applied, emissions of VOC from #20 Coater shall be controlled by the operation and maintenance of a Catalytic Incinerator. [06-096 CMR 123]

C. SDW shall operate the Catalytic Incinerator such that it has a 0.5 second gas retention time. [06-096 CMR 123]

D. SDW shall maintain the Catalytic Incinerator inlet temperature at or above the average inlet temperature measured during the most recent compliance test which demonstrated compliance with the VOC capture and control efficiency or VOC emission rate requirements. [06-096 CMR 140, BPT (A-29-70-H-A)] **Enforceable by State-only**

E. Emissions of VOC from each air knife on #20 Coater shall be controlled by its associated wet scrubber. SDW shall maintain water flow to the wet scrubber at all times during coating operations.
[06-096 CMR 115, BACT (A-29-77-4-A)]

F. The #20 Coater 7th Zone Dryer, Floatation Dryers, and the Catalytic Incinerator are licensed to fire natural gas. [06-096 CMR 140, BPT] **Enforceable by State-only**

G. #20 Coater Dryers and Catalytic Incinerator Emission Limits

1. Emissions from the #20 Coater 7th Zone Dryer shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 CMR 140, BPT	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.03	06-096 CMR 115, BACT (A-29-777-2-M)	Federally Enforceable
PM_{10}	0.03	06-096 CMR 115, BACT (A-29-777-2-M)	Federally Enforceable
SO_2	0.003	06-096 CMR 115, BACT (A-29-777-2-M)	Federally Enforceable
NO_x	0.40	06-096 CMR 115, BACT (A-29-777-2-M)	Federally Enforceable
CO	0.3	06-096 CMR 115, BACT (A-29-777-2-M)	Federally Enforceable
VOC	0.02	06-096 CMR 115, BACT (A-29-777-2-M)	Federally Enforceable

2. Visible emissions from the #20 Coater 7th Zone Dryer shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hr period. [06-096 CMR 115, BACT (A-29-77-2-M)]

3. Emissions from the #20 Coater Floatation Dryers shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.05	06-096 CMR 115, BACT (A-29-77-4-A)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	0.40	06-096 CMR 115, BACT (A-29-77-4-A)	Federally Enforceable
PM_{10}	0.40	06-096 CMR 115, BACT (A-29-77-4-A)	Federally Enforceable
NO_x	0.78	06-096 CMR 115, BACT (A-29-77-4-A)	Federally Enforceable
CO	0.65	06-096 CMR 115, BACT (A-29-77-4-A)	Federally Enforceable

4. Emissions from the Catalytic Incinerator shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	4.0	06-096 CMR 115, BACT (A-29-777-1-M)	Federally Enforceable
PM_{10}	4.0	06-096 CMR 115, BACT (A-29-777-1-M)	Federally Enforceable
SO_2	0.006	06-096 CMR 115, BACT (A-29-777-1-M)	Federally Enforceable
NO_x	1.0	06-096 CMR 115, BACT (A-29-777-1-M)	Federally Enforceable
CO	1.8	06-096 CMR 115, BACT (A-29-777-1-M)	Federally Enforceable

Pollutant	tpy	Origin and Authority	Enforceability
PM	3.99	06-096 CMR 115, BACT (A-29-77-1-M)	Federally Enforceable

5. The Catalytic Incinerator shall reduce overall emissions of VOC by 95% or to a rate equal to 4.8 pounds of VOC per gallon of solids applied. [06-096 CMR 123]

6. Visible emissions from the Catalytic Incinerator shall not exceed 20% opacity on a six (6) minute block average basis during periods when the coater is running ETL coating and 10% opacity on a six (6) minute block average basis when the coater is running any other coating. [06-096 CMR 140, BPT (A-29-70-A-I)]

H. Compliance Methods

1. Compliance with the annual PM emission limit shall be based on the amount of catalyst attrition in that time period determined using a mass balance approach. [06-096 CMR 140, BPT (A-29-70-F-A)]

2. To demonstrate compliance with the Catalytic Incinerator VOC emission limits (including capture and control efficiency), SDW shall perform emission testing every other year (by 12/31/14) in accordance with 06-096 CMR 126 while running coatings containing greater than 2.9 pounds of VOC per gallon of coating applied. [06-096 CMR 140, BPT and 06-096 CMR 126]

3. Compliance with all other emission limits listed above shall be demonstrated in accordance with the appropriate test methods upon request by the Department. [06-096 CMR 140]

I. Periodic Monitoring

SDW shall monitor and record the following for the #20 Coater, associated dryers, and Catalytic Incinerator as indicated in the following tables. [06-096 CMR 140, BPT]

#20 Coater and associated dryers			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Fuel Use (for #20 Coater, all assc dryers, & Cat Incin. combined)	scf	Fuel flow meter	Monthly and 12-month rolling total
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC Emitted (post control if applicable)	tons	calculations	Monthly and 12-month rolling total

Wet Scrubbers		
Item to be Monitored	**Monitor**	**Record**
Flow Switches	Continuously	Once per shift

Catalytic Incinerator			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Coating being used on #20 Coater at time of operation	coating type	Logbook / Recordkeeping	As occurs
Dates of catalyst bed changes	date	Logbook / Recordkeeping	As occurs
Amount of catalyst added/removed	lbs	Logbook / Recordkeeping	As occurs
Inlet temperature	Degrees Fahrenheit	Thermocouple	Monitor: Continuously Record: Continuously
Exhaust temperature	Degrees Fahrenheit	Thermocouple	Monitor: Continuously Record: Continuously
Temp rise across bed	Degrees Fahrenheit	N/A	Monitor: Continuously Record: Continuously
VOC emissions	tons	calculations	Monthly & 12-month rolling total

J. Federal Regulations

The #20 Coater is subject to 40 CFR Part 63, Subpart JJJJ, and SDW shall comply with all applicable requirements thereof.

(22) **#9 Paper Machine and On-Line Coater**

A. VOC content of the coatings used on #9 Paper Machine's On-Line Coater shall not exceed 2.9 pounds of VOC per gallon of coating applied. [06-096 CMR 123]

B. Total VOCs in coatings applied on #9 Paper Machine On-Line Coater shall not exceed 40.0 tpy. [06-096 CMR 140, BPT]

C. Periodic Monitoring

SDW shall monitor and record the following for the #9 Paper Machine and On-Line Coater as indicated in the following table. [06-096 CMR 140, BPT]

#9 Paper Machine and On-Line Coater			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Coating VOC content	lb VOC per gal of coating applied excluding water and exempt compounds	Certification	For each coating used
VOC emitted	tons	calculations	Monthly & 12-month rolling total

D. Federal Regulations

The #9 Paper Machine On-Line Coater is subject to 40 CFR Part 63, Subpart JJJJ, and SDW shall comply with all applicable requirements thereof.

(23) **Facility-Wide Coater Requirements**

A. SDW is subject to, and shall comply with, the requirements of 06-096 CMR 123 including, but not limited to, the following:

1. New and used coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon, including a coating mixed on the premises, shall be stored in a nonabsorbent, non-leaking container. Such container shall be kept closed at all times except when the container is being filled.

2. Spills and leaks of VOC-containing coating or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating or cleaning solvent shall be immediately absorbed and disposed of, or in the case of roll cleaning solvent, waste to the sewer.

3. Absorbent applicators, such as cloth and paper, which are moistened with coating or cleaning solvent containing greater than 2.9 lb VOC/gallon shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling.

4. Coating or cleaning solvent containing greater than 2.9 lbs VOC/gallon shall be conveyed from one location to another in a closed container or pipe.

5. Cleaning shall be performed to minimize emissions of VOC.

[06-096 CMR 123]

B. Emissions from #2 Coater and #20 Coater combined shall not exceed 139.7 tpy on a 12-month rolling total basis.
[06-096 CMR 140, BPT (A-29-70-E-A)]

(24) **Bulk Handling Systems**

A. SDW shall establish an inspection/maintenance plan for the bulk handling systems. The plan shall provide for monthly inspections of the systems and for record keeping of inspection findings and maintenance or repairs done on the equipment. [06-096 CMR 140, BPT (A-29-70-A-I)]

B. Visible emissions from any baghouse shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. [06-096 CMR 101]

C. Visible emissions from any bulk handling equipment, other than baghouses, shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. [06-096 CMR 101]

(25) **Ash Loading System**

A. SDW shall establish an inspection/maintenance plan for the Ash Loading System. The plan shall provide for monthly inspections of the systems and for record keeping of inspection findings and maintenance or repairs done on the equipment. [06-096 CMR 140, BPT (A-29-70-A-I)]

B. Visible emissions from the dry ash system shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. [06-096 CMR 101]

C. Visible emissions from the wet ash system shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a one hour period. [06-096 CMR 101]

D. Periodic Monitoring

SDW shall monitor and record the following for the Dry Ash Loading System as indicated in the following table. [06-096 CMR 140, BPT]

Dry Ash Loading System			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Baghouse Pressure Drop	inches of water / psig	Pressure Gauges (inlet & outlet)	Once per shift during operation
Maintenance activity records	Each	Record in logbook	Maintain records documenting maintenance activities performed on the dry ash system baghouse and wet ash system water sprays.

(26) **Gasoline Storage Tank**

A. The fill pipe shall extend to within 6 inches of the bottom of the gasoline storage tank. [06-096 CMR 118]

B. SDW shall maintain records of the monthly and annual throughput of gasoline. [06-096 CMR 118]

(27) **Parts Washers**

Parts washers at SDW are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

A. SDW shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
    1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
    2. Wipe cleaning; and,
    3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 CMR 130.
    1. SDW shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
        a. Waste solvent shall be collected and stored in closed containers.
        b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
        c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a

pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.

d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
h. Work area fans shall not blow across the opening of the degreaser unit.
i. The solvent level shall not exceed the fill line.

2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

(28) **Ultracast Roll Cleaning**

A. The VOC content of the solvents used in the Ultracast Roll Cleaning process shall not exceed 10% by weight. [06-096 CMR 140, BPT]

B. Total emissions of VOC from the Ultracast Roll Cleaning process shall not exceed 2.0 tpy. [06-096 CMR 140, BPT]

C. Periodic Monitoring

SDW shall monitor and record the following for the Ultracast Roll Cleaning process as indicated in the following table. [06-096 CMR 140, BPT]

Ultracast Roll Cleaning			
Item to be Monitored	**Units of Measure**	**Monitoring Tool/Method**	**Frequency**
Cleaning Solvent VOC Content	percent by weight	Safety Data Sheets	For each solvent used
VOC emitted	tons	calculations	Monthly & 12-month rolling total

(29) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(30) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(31) **CEMS Recordkeeping**

A. The licensee shall maintain records documenting that all CEMS and COMS are continuously accurate, reliable and operated in accordance with 06-096 CMR 117 (as amended), 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
B. The licensee shall maintain records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P; and
C. The licensee shall maintain records of other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.
[06-096 CMR 140]

Enforceable by State-only

(32) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS), and Continuous Opacity Monitoring Systems (COMS) required by this license. [06-096 CMR 117]

A. All control equipment downtimes and malfunctions;
B. All CEMS or COMS downtimes and malfunctions;
C. All parameter monitor downtimes and malfunctions;
D. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;

1. Standard exceeded;
2. Date, time, and duration of excess event;
3. Amount of air contaminant emitted in excess of the applicable emission standard expressed in the units of the standard;
4. A description of what caused the excess event;
5. The strategy employed to minimize the excess event; and
6. The strategy employed to prevent reoccurrence.

E. A report certifying there were no excess emissions, if that is the case.

(33) **Semiannual Reporting** [06-096 CMR 140]

A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.

B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.

C. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(34) **Annual Compliance Certification**

SDW shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31 of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 CMR 140]

(35) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

A. A computer program and accompanying instructions supplied by the Department; or
B. A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted by the date as specified in 06-096 CMR 137.

[06-096 CMR 137]

(36) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 CMR 102	Open Burning	-
06-096 CMR 109	Emergency Episode Regulation	-
06-096 CMR 110	Ambient Air Quality Standard	-
06-096 CMR 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(37) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs.
[40 CFR, Part 82, Subpart F]

(38) **Asbestos Abatement**

When undertaking Asbestos abatement activities, SDW shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(39) **Expiration of a Part 70 license**

A. SDW shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18 months prior, to the expiration of this air license.
B. Pursuant to Title 5 MRSA §10002, and 06-096 CMR 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under

06-096 CMR 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

(40) **New Source Review**

SDW is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emissions license and the NSR requirements remain in effect even if this 06-096 CMR 140 Air Emissions License, A-29-70-I-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 18 DAY OF July , 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

[Note: If a complete renewal application as determined by the Department, is submitted at least 6 months prior to expiration but no earlier than 18 months, then pursuant to Title 5 MRSA §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the renewal of the Part 70 license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 6/30/08
Date of application acceptance: 7/24/08

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Poland, Bureau of Air Quality.

Filed
JUL 21 2014
State of Maine
Board of Environmental Protection